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AUTHOR Kelly, Edward J.; And Others
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ABSTRACT

In this seven-section document about special education curriculum and training for regular educators, pertinent factors involved in the placement and treatment of exceptional students in regular classrooms are presented. Teachers' responsibilities in a mainstreamed classroom are clarified, and guidelines are offered for successfully meeting them. Section A deals with appropriate instructional objectives and content for students with the handicapping conditions of: mental retardation, deafness, orthopedic and other health impairments, emotional disturbances, visual and speech impairments, and specific learning disabilities. Statements outline the general program thrust for the development of Individualized Education Programs (IEPs), which can be adapted to unique student needs. Adjustive and adaptive goals in special education, for each of these handicapping conditions, are outlined. Section B presents an outline of the Education of All Handicapped Children Act (Public Law 94-142). An explanation is given of the features of IEPs and their development and implementation. A sample is included of a completed IEP form. In Section C, the assessment of exceptional children is covered. Examples of ways to screen for instruction and referral, sources and uses of information for special education placement, standardized tests commonly used for psychological evaluation, and notes on diagnostic prescriptive teaching and task analysis are included. Academic strategies are presented in Section D, including reading strategies, screening strategies for developmental dyslexia, a kinesthetic method of teaching words, factors influencing ease/difficulty of handwriting tasks, mathematics strategies, and curricular adaptations for the mildly handicapped secondary student. Section E discusses methods for behavior management and covers classroom behavior, study hall behavior, reward systems, and elimination of undesirable behavior. Career education for the handicapped student is discussed in section F, and section G offers advice on working with parents. (JD)

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RESOURCES FOR CLASSROOM TEACHERS

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PROJECT S.P.E.C.T.R.E.

Special Education Curriculum and Training
for Regular Educators

SP 021 447

PROJECT DIRECTOR:

Edward J. Kelly, Ed.D.
Chairman, Special Education Department
University of Nevada, Las Vegas
4505 Maryland Parkway
Las Vegas, Nevada 89154

PROJECT STAFF:

Mark Beals, Ph.D.
Judith Dettre, Ed.D.
John VanVactor, Ph.D.
Bill Wagonseller, Ed.D.
Jim Simpson, M.S.

RESOURCES FOR CLASSROOM TEACHERS

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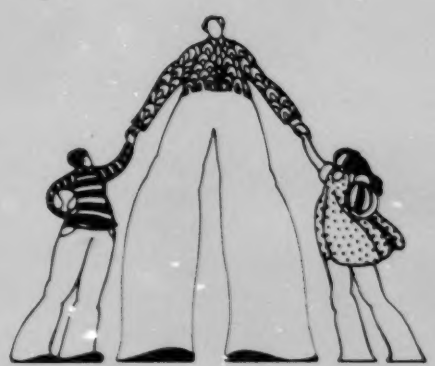

SECTION A

BASIC CONCERNS AFFECTING EXCEPTIONAL CHILDREN

1. Commonly Cited Incidence Figures in Special Education.....1
2. Individual Educational Programming: Definitions of "Appropriateness".....2
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COMMONLY CITED INCIDENCE FIGURES IN SPECIAL EDUCATION

HANDICAPPING CONDITION	INCIDENCE FIGURE	ESTIMATE SERVED/AGES BY PL 94-142 IMPLEMENTATION
1. MENTALLY RETARDED (ALL LEVELS)	3.0%	90%
2. DEAF AND HARD OF HEARING	0.8%	56%
3. ORTHOPEDIC AND OTHER HEALTH IMPAIRED	0.5%	78%
4. EMOTIONALLY DISTURBED	4.0%	19%
5. VISUALLY IMPAIRED AND BLIND	0.1%	65%
6. SPEECH IMPAIRED	5.0%	88%
A. FUNCTIONAL MISARTICULATION	3.0%	--
B. STUTTERING	1.0%	--
C. ALL OTHER CONDITIONS	1.0%	--
7. SPECIFIC LEARNING DISABLED	2.0%	13%
TOTAL	15.4%	57%

*Note that several high incidence areas are not well served in current special education programs. These include, most specifically, children who are emotionally disturbed and learning disabled. Current placement figures would suggest that the vast majority of these children are in regular classrooms and not identified and/or adequately served.

Individual Educational Programming: Definitions of "Appropriateness"*

P.L. 94-142 guarantees all handicapped children a free appropriate public education. To be appropriate, such an education requires individualized programming which is germane to the specific needs of mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, emotionally disturbed, orthopedically and other health impaired and learning disabled children!

It is possible however, to implement "individualized educational programs" for each handicapped child without the establishment of at least general statements of appropriateness/handicapping condition. To this end, the present paper proposes consideration of comprehensive statements covering appropriate instructional objectives and content for each specific handicapping condition. Such statements are viewed as providing a general program thrust for the development of individualized education programs which can be adapted to the unique needs of specific handicapped children. Children with multiple handicaps, (i.e., such as those with mixed learning disabilities and emotional problems) will, of course, require appropriate instructional content from two or more indicated categorical areas.

Mental Retardation

Federal regulations indicate that the term mental retardation denotes "significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's educational performance". While the intellectual, developmental, and adaptive components of this definition are all critical to a balanced assessment of mental retardation, adaptation is its pre-eminent curricular consideration.

Placement in mental retardation largely depends upon determination of its relative severity. Profoundly retarded children are generally best served in hospital or residential settings with attached health care services. Severely retarded children are typically served in special school or self-contained classroom programs, with eventual integration into community agency and/or shelter workshop operations occuring during late adolescence. While some moderately to mildly retarded children may require self-contained special class services, most are better served in resource or mainstream placements attached to integrated regular classroom environments.

For severely to mildly retarded children in all school-relevant contexts, acquisitions and applications of basic adaptive curricular content are most critical. An adaptive curriculum is one which facilitates a child's relative survival in various social contexts. In summary fashion its content includes the following components:

a. basic self-sufficiency learnings, such as time and place orientations, self-management skills, assumption of social responsibilities, proper emotional controls, etc.
b. gross and fine motor skills acquisitions designed to enhance physical development, improve coordination and manipulative functions and provide the necessary foundation for mobility training and subsequent prevocational skills.
c. communication skills acquisitions, including enhancement of oral, sign and/or gestural forms and expressive processes.
d. social-interpersonal relations sufficient to enable the individual to understand personal needs and perceptions, to get along adequately with others, etc.
e. basic academics, with special emphasis upon the acquisition of elementary-level reading skills, arithmetic computation, concept and processing skills, the mastery of simple oral and written expression and elementary civics.
f. pre-vocational and vocational learnings and related placements designed to orient the individual to the world of work and the establishment and maintenance of meaningful employment.
g. economic education, including individual income maintenance and management, comprehension and mastery of basic economic concepts and operations (such as the function of interest payments, how to file income tax returns, etc.), consumer education, etc.
h. basic health education, including the general understanding of bodily functions and processes, appropriate responses to potential medical problems, etc.

*From a synopsis compiled by Edward J. Kelly.

*Categories cited here and their subsequent definitions correspond to those described in the December 30, 1976 *Federal Register:* 41,252, Education of Handicapped Children and Incentive Grants. Section 121a4, "Definitions."

i. sex and marriage education, including necessary learning pertaining to sex role and identification, sexual functioning, the mechanics of pregnancy and contraception and the socio-emotional dynamics of marital and non-marital relationships.
j. child care and management, including the physical essentials of child care, growth and development, and basic child raising styles and techniques.
k. community resource education, with special reference to the use of community resources designed to facilitate employment and re-employment, maintenance of basic socio-economic welfare, the solution of personal, social or legal problems, etc.

l. mobility education, including driver education and (where appropriate) the proper use of public transportation.
m. leisure education, including the appreciation and use of community and other leisure resources, development and enhancement of recreational and sport-related skills, etc.

Obviously, a comprehensive adaptive curriculum can encompass an entire "life in school" from preschool to post-secondary years. While such a program is most applicable to those whose survival potential is jeopardized (i.e., the moderately to severely retarded, the severely orthopedically and other health impaired, etc.), many of its components can be utilized in individual mainstream/resource room programs for the mildly retarded and the adolescent learning disabled as well.

The utilization of adaptive components in individualized educational programs will be contingent not only upon the relative severity of a child's handicap, but also his/her relative age. Fortunately there are several chronologically organized adaptive curriculum guides which are applicable to both the development of individual program statements and subsequent constructive parental involvement in all phases of their child's adaptive progress.[2]

Deafness and Hard of Hearing Conditions

Federal regulations distinguish between these categorical areas by noting that:

a. deafness means "a hearing impairment which is so severe that a child's hearing is non-functional for the purposes of educational performance."
b. hard of hearing means "a hearing impairment, whether permanent or fluctuating, which adversely affects a child's educational performance but which is not included under the definition of deaf in this section."

The essential difference in programming between deaf and hard of hearing children is that the former, because they are unable to profit from auditory enhancement, are more likely to require educational services through an exclusively self-contained special educational environment. In such classrooms, deaf children require the following services:

1. Language stimulation, acquisition, and concept formation through combined visual, tactile, and kinesthetic modalities.
2. Speech/language reception and expression through lip reading skills, manual, oral, and cued speech training suited to the specific needs of the individual deaf child.
3. Curricular content in basic and advanced academic subjects shaped to correspond to the learning requirements and age level of the individual deaf child.
4. Modifications of adaptive programming suited to the unique learning requirements of the deaf, with special focus upon pre-vocational, vocational and related skills applications.

The hard of hearing, on the other hand, may require some type of self-contained placement for a time, but they are much more likely to receive special education services in resource and mainstream classroom placements. In both self-contained and less restrictive placements, the hard of hearing commonly require the following services:

1. Enhancement of auditory receptive processes through amplification, selective seating, the use of visual and tactile cues, etc.
2. Language stimulation, acquisition and concept formation through combined auditory, visual, tactile and kinesthetic modalities.
3. Speech therapy for hearing loss-related misarticulated sounds.
4. Curricular content in basic and advanced academic subjects shaped to correspond to the specific learning requirements and age level of the hard of hearing child.

[2] A good sample chronological breakdown of expected adaptive learning is contained in the Dettre-Bransford *Expected Outcomes Chart* derived from Kolstoe's delineation of "Persistent Life Problems of the Mentally Retarded".

5. Modifications of adaptive programming suited to severe hard of hearing adolescents, with special emphasis upon pre-vocational, vocational, and related skills applications.

Finally, in spite of any perceived difference in placement and programming which appear to distinguish the deaf from the hard of hearing, they share at least two common needs. First, because moderate to severe hearing impairment affects one's acquisition of basic language concepts, early infant-childhood language stimulation is absolutely essential. Second, extensive parent involvement in all phases of the deaf and hard of hearing child's program is critical, particularly in the areas of language acquisition and the development of expressive skills.

Orthopedic and Other Health Impairments

Each of these categorical areas subsumes a variety of handicapping conditions. To distinguish between the two general areas federal regulations note that:

a. the term "orthopedic impairment" refers to impairments "which adversely affect a child's educationa' performance. The term includes impairments caused by congenital anomaly (e.g., clubfoot, absence of some member, etc.) impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, etc.) and impairments from other causes (e.g., fractures or burns which cause contractures, amputation, cerebral palsy, etc.)."
b. the term "other health impaired", on the other hand, refers to conditions of "limited strength, vitality, or alertness, due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia , epilepsy, lead poisoning, leukemia, or diabetes."

The most desirable placement of the orthopedically impaired is essentially contingent upon the type of impairment and its relative severity. When special facilities and personnel (such as physical and occupational therapists, nurses, etc.) are required to safely accommodate the child in a modified environment, placements in self-contained school and/or classroom settings specifically designed for the orthopedically impaired would be most desirable. Where the impairment condition is relatively mild, modified placements in regular classrooms can be effected.

While specific instructional programs for the orthopedically impaired will very somewhat according to the type of condition and the needs of each child, most will require the following services:

1. Modification of the school environment to permit convenient access to school, mobile functioning in school and classroom contexts, and the use of all essential educational and physical facilities.
2. Mobility facilitation, training and adaptations to enhance the potential movement of the orthopedically impaired in home, school, and other environments. This enhancement of the child's mobility may require the application of physical and occupational therapeutic skills, adaptive physical education and recreation, the use of special equipment and facilities, etc.
3. Modification of adaptive curricular programming suited to the needs of the individual orthopedically impaired child, with special emphasis upon the development of self-sufficiency, basic health, pre-vocational and vocational training and related skills.
4. Instruction in basic and advanced academic subjects shaped to correspond to the learning requirements and age level of the individual orthopedically impaired child.
5. Educationally relevant medical and health care services and prosthetic devices directly applicable to the child's required adaptation to school or classroom environments, learning process, etc.

Desirable placements for health impaired children also vary according to the type and severity of the specific condition. The health and safety of progressive and chronic severely impaired children commonly mandate placement in hospital, self-contained class, or special school settings. Temporarily severe conditions (i.e., short term traumatic or disease conditions) often require homebound placement and instruction. Chronic, but mild health impairments can usually be best accommodated in the regular classroom.

Instructional programs for the health impaired will vary according to the type and severity of the specific condition, but certain common elements should be emphasized. First, modifications of the school program and/or environment may be required for even the mildly health impaired due to health, safety and/or energy limitations specific to the individual condition. Second, curricular content in basic and advanced academic subjects will need to correspond to the learning requirements of the individual health impaired child whether in regular classroom, homebound, special school or hospital setting. Finally, programs serving both the orthopedically and other health impaired depend upon

extensive parental involvement and cooperation for much of their success. Parents must be involved in home-related applications of health care services, in fostering their child's mobility, in adaptive training, in their acquisition of academic and non-academic skills, etc. In this categorical area therefore, cooperative parental interaction with the school program is absolutely mandatory.

Emotional Disturbance

Serious emotional disturbance in children and adolescents reflects "a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree"," an inability to learn which cannot be explained by intellectual, sensory, or health factors; and inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms, or fears associated with personal or school problems. The term includes children who are schizophrenic or autistic. The term does not include children who are socially maladjusted but not emotionally disturbed." This federal definition is, to some extent, a residual definition, in that it rules out learning failures which are due to such non-affective factors as general health and intelligence, and further excludes consideration of the socially maladjusted (i.e., the delinquent).

Placement for the seriously emotionally disturbed largely depends upon the condition's degree of "seriousness". Some severely disturbed children may require the range of services found only in residential treatment centers with attached foster parent programs. Others may reside with their natural parents, but still exhibit sufficient behavioral problems to require placement in self-contained special classes. Mild to moderate conditions of emotional disturbance, on the other hand, can usually be accommodated in resource or mainstreamed placements with partial or full integration into regular classroom contexts.

School programs for emotionally disturbed children are predicated on the assumption that they essentially require appropriate management and reinforcement procedures designed to modify whatever maladjustive behaviors interfere with learning, their disordered perceptions of self and their inability to establish meaningful, constructive relationships with others. While remediation in basic academic subjects may be required for specific disturbed children, there is, in fact, no set curriculum applicable to the emotionally disturbed. In the final analysis, all therapeutic and educational procedures serve adjustive ends - i.e., they facilitate the emotionally disturbed child's integration into regular classroom contexts and/or enhance perceptions of self.

Appropriate programming for emotionally disturbed children is expressed through the following procedures designed to facilitate integration into regular classroom and/or normal functioning contexts:

a. Structured self-contained or resource room programming appropriate to the needs of the individual disturbed child.
b. Modifications of individual problem behaviors and perceptions through applications of contingency management techniques, with special emphasis upon the positive reinforcement and/or encouragement of appropriate behaviors, structured behavioral expectancies, self-directed graphing and reinforcement, etc.
c. Application of special therapeutic methodologies, including simulation techniques, role playing, transactional analysis, group and individual counseling strategies, (including, where appropriate, psychiatric services), etc. germane to the emotional needs of the individual child.
d. Instruction in basic and advanced academic subjects shaped to correspond to the learning requirements and age level of the individual emotionally disturbed child. Instruction in this context must include appropriate curricular remediation in basic academic subjects geared to the individual child's instructional level per subject.
e. Curricular remediation in basic academic subjects, appropriate to the individual child's instructional level/subject.
f. Parent involvement including (when appropriate) parent counseling, parent education programming, modification of school relevant adjustive and/or childraising problems, parent facilitation of academic and adjustive behavioral programming, etc.

More than other categorical areas, the importance of parental involvement in all phases of programming for emotionally disturbed children cannot be too heavily stressed. Without such involvement, programming in this area is likely to be ineffective.

Visual Handicaps

Visual handicapping conditions, according to federal guidelines, refer to "visual impairment

which, after correction, adversely affects a child's educational performance. The term includes both partially seeing and blind children." To further clarify the term, children are legally blind when they possess centered visual acuity of 20/200 or less in the better eye with corrective lenses; the partially seeing are those whose remaining visual acuity is between 20/200 and 20/70 with corrective lenses.

Placement for the visually handicapped depends on the severity of the handicap, the child's age and his/her relative acquisition of mobility and related adaptive skills. Most blind children will require placement in self-contained classrooms and/or residential schools until they possess sufficient adaptive skills to be gradually integrated into regular classroom contexts. Partially seeing children, on the other hand; are usually best placed in regular classrooms attached to resource or mainstream programs and services. Children with severe visual impairment (and therefore minimal remaining visual acuity), however, or those with multiple handicaps may still require self-contained placement to most effectively meet their educational needs.

In either residential schools or self-contained classes, blind children require a variety of services and instructional contents - services and contents which must be maintained when they are integrated into regular classroom contexts.
These services include:

1. Mobility and orientation training, including the acquisition of necessary tactile-kinesthetic, sensory, balance, gait, travel, and obstacle perceptive skills.
2. Adaptive physical education and recreational programming applicable to the individual sensory, motor, and learning characteristics of the blind child.
3. Acquisition of braille or analogous touch reading skills.
4. Development and maintenance of enhanced listening skills through informal and programmed instruction, the use of special aural materials, etc.
5. Counseling and related services (where appropriate) designed to adjust the blind child to the loss of visual skills, function appropriately in a seeing world, etc.
6. Instructional content in basic and advanced academic subjects shaped to correspond to the age level and individual learning characteristics of the blind child.
7. Curriculum stressing basic adaptive content applicable to the needs of the individual blind child with special emphasis given to self-sufficiency, mobility education, health, pre-vocational, vocational and related skills acquisitions.

In many ways, appropriate programming for partially seeing children is similar to that already indicated for the blind, particularly when such children have extremely limited residual visual skills. The moderately to severely visually impaired will, for example, require mobility training, adaptive physical education and recreation, enhanced listening skills and adaptive skills acquisitions. These services and contents address essential educational needs for the partially seeing which must be met whether such children remain in self-contained classes or are integrated into resource or regular classrooms.

Since partially seeing children commonly retain useable vision, however, their appropriate education must also reflect sight utilization programming. This programming includes such considerations as;

a. the provision of illumination settings appropriate to the needs of the individual partially seeing child.
b. the employment of large print texts and related reading materials,
c. the use of special high-contrast instructional aides and materials.
d. the employment of optical magnification technology and procedures.

Like other categorical areas, programs for both the blind and partially seeing are likely to be most effective when parents are actively involved in all phases of their children's education. Parent involvement in this context includes practical counseling to effect appropriate child care and childraising adaptations, the facilitation of sight utilization programs, mobility training and the acquisition of both academic and adaptive skills.

Speech Impairment

Federal regulations define the speech impaired as those possessing "a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a child's educational performance."

To further clarify these terms it should be noted that;

1. Stuttering refers to speech dysfluency characterized by excessive prolongations and repetitions in sounds and hesitations and/or blocking in one's general speech pattern.
2. Impaired articulation refers to the defective articulation of speech sounds (phonemes).

While some articulatory impairments stem from structural causes such as cerebral palsy, cleft palate, dental anamolies, etc., functional misarticulation, involving delayed or inappropriate learning of speech sounds, is the most prevalent condition.

3. Language impairments refer to disorders affecting one's use of spoken symbols arranged systematically for the expression and comprehension of ideas. Structural language impairment may stem from neurological trauma (i.e. aphasia) or as a logical corrollary to severe hearing impairment. Functional impairments in language (delayed language) most commonly stem from developmental delay and/or disruptions in the child's expected acquisition and expression of linguistic concepts and symbols.
4. Voice impairment refers to disorders affecting the pitch, loudness, flexibility and/or quality of vocal sound. Structural vocal disorders can result from a variety of disease or disruptive growth sources. Functional vocal disorders stem from such causes as vocal misuse, malearned adolescent pitch transitions, and related behavioral factors.

Of the various speech impairments cited above, only children with severe language impairment would appear to warrant special class or resource room placement of any sort. Since severe language expressive and receptive process disorders can profoundly influence a child's functioning in a host of school-related areas (e.g. intellectual, academic, social etc.), the affected children often require an extensive range of services which fall beyond the scope of the typical mainstream or regular classroom. The other types of speech impairments, irrespective of their relative severity, can be treated in regular classrooms with therapeutic services provided on a scheduled basis by itinerant clinicians. Mild to moderate language impairments should also be treated in regular classroom contexts as well.

While the forms of itinerant therapeutic services will vary according to the specific type of speech impairment, such services must be provided on a regularly scheduled continucus basis until specified criteria for improvement are satisfied. Appropriate treatment in this context mandates the application of consistent and continuous services rather than those which are reflected in block scheduling.

Since treatment strategies vary according to the type of speech impairment served, a general breakdown of appropriate strategies/impairment is in order.

1. Stuttering requires the following approaches:
   a. for primary or young secondary stutterers, parent counseling is mandatory; direct involvement with the child should be minimal.
   b. for secondary stutterers (ages 10+), parent counseling remains mandatory; therapy for the child includes affective counseling, symptomatic therapeutic methods, the modification of stuttering behavior, etc.

2. Impaired articulation requires the following approaches;
   a. for cerebral palsied speech and related conditions, therapy designed to establish more effective control of motor movement affecting articulatory sound production.
   b. for cleft palate speech, therapy is designed to reduce hypernasality and improve the production of denasal articulatory sounds.
   c. for functional misarticulation, therapy is designed to teach or correct misarticulated sounds through auditory discrimination, correct phonetic placement, clinical practice and carry over.

3. Language impairment requires the following approaches;
   a. for aphasia, therapy designed to promote the restoration of symbolic-conceptual association affecting the child's spoken linguistic expression and/or reception.
   b. for delayed language, therapy designed to promote language stimulation, acquisition and concept formation through combined auditory, visual and tactile-kinesthetic modalities.

4. Voice impairments require the following approaches;
   a. structural vocal disorders in children characteristically require medical intervention: therapy (when appropriate) is designed to improve the quality of vocal sound.
   b. for functional vocal disorders, therapy includes rest for vocal misuse, and the improvement of vocal pitch and quality in functional malearning cases.

Beyond these perceived differences in programming, speech impaired children do share at least two common needs. First, therapeutic intervention for most speech impaired children, if it is to be truly appropriate, must extend to their preschool, early developmental years. This observation is particularly apt for primary stutterers, those with severe articulartory impairments, and the language impaired. Second, extensive parent involvement in all phases of programming for the speech impaired should be pursued as a necessary part of the therepeutic process.

Specific Learning Disability

The current federal definitions of learning disability are essentially residual; that is, their precision is contingent upon the "ruling out" or control of several factors (such as intelligence, socio-economic disadvantage, etc.). Given these contingencies, specific learning disability can be defined as "a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain disfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, of motor handicaps, of mental retardation, or of environmental, cultural, or economic disadvantages."

Desirable placement for the learning disabled must account for both the extent and severity of the disability and the child's age. Pre-adolescent, severely learning disabled children may require the extensive range of services available only in self-contained special classes or residential schools. Mildly to moderately learning disabled pre-adolescents can be placed in regular classrooms with attached resource room service components. Learning disabled adolescents, particularly those with continuing moderate to severe learning problems, will need to shift from remedial or compensatory programming to the acquisition of basic adaptive skills. For these children, pre-vocational and vocational services must be provided as a necessary adjunct to any resource and/or regular classroom placement.

Appropriate programming for learning disability reflects the complexities inherent in its categorical definition. The following curricular components and related services are generally applicable in this categorical area, but it should be further noted that few specific learning disabled children will require full consideration of all components (i.e., their pattern of disability will usually require the application of components relevant to their specific needs).

1. Compensatory and/or remedial programming designed to ameliorate deficits or dysfunctions affecting motor functioning, environmental response mechanisms, visual, auditory, tactile-kinesthetic or haptic perceptions, receptive, expressive and associative processes, etc. To further clarify these component areas as appropriate to the curricular needs of specific learning disabled children;
   a. motor functioning includes whatever gross and fine motor tasks relate to the child's appropriate school-relevant performance.
   b. environmental response mechanisms include, body image, orientation, directionality, balance, etc.; both motor and environmental response dysfunctions may also warrant adaptive physical education and recreational interventions.
   c. visual perception includes visual recognition, visual memory, figure-ground perception, visual-motor integration, etc.
   d. auditory perception includes auditory recognition, auditory discrimination, auditory sequential memory, auditory-motor integration, etc.
   e. haptic perceptions include texture, mass, dimension and form indentification and discriminations from tactile and kinesthetic cues.
   f. receptive, expressive and associative processes include auditory and visual decoding and encoding response skills, the reception and expression of oral and written language, listening and comprehension skills, etc.

2. Academic compensatory and/or remedial programming designed to ameliorate basic academic subject matter deficiencies in reading, arithmetic, and language arts, and special problems in social studies and science. To further clarify these subject matter areas for remedial purposes:
   a. reading includes considerations germane to one's independent and instructional comprehension and accuracy levels, basic sight vocabulary, word analysis skills, relative reading rate, study skills, etc.
   b. arithmetic includes considerations germane to one's independent and instructional level skills in arithmetic computation, reasoning, concepts and processes.
   c. language arts includes considerations germane to one's relative independent and instructional level skills in spelling, handwriting, grammatical forms and usages, written expressions, etc.
   d. special problem areas in social studies and science include considerations germane to one's relative skills in such reading-independent functions as map and graph reading, chronological and geographic placement, basic experimental or discovery techniques, etc.

3. Language stimulation, acquisition and concept formation through combined visual, auditory, and tactile-kinesthetic modalities: amelioration of psycholinguistic symbol-conceptual receptive, associative, and/or expressive deficits or deficiencies.

4. Modification of individual adjustive problem behaviors and/or learning failure reactions through applications of appropriate management techniques.

5. Modifications of adaptive curricular programming suited to the needs of the individual adolescent learning disabled child, with special emphasis upon the acquisition of pre-vocational, vocational, and related skills.

Like other categorical areas, programs for the learning disabled are much more likely to be effective where parents are actively involved in all academic and non-academic remedial phases of the child's program. At the same time, many moderate to severely learning disabled children evidence sufficient developmental learning-related problems to warrant extensive early childhood intervention to satisfy their requirements for appropriate programming.

Epilogue

The various statements of appropriate instructional content, programming and service/handicapping condition are offered to facilitate the structuring of individual education programs. These statements reflect the general parameters of "appropriateness", i.e., they conform not only to accepted professional theory and practice in special education, but also to the letter and spirit of P.L. 94-142. In so far as these parameters are truly appropriate, individual education program statements should reflect both their overall intent and the applicability of their logical components to the unique needs of specific handicapped children within each categorical area.

In this context it should be noted that the definitions of specific handicapping conditions employed in this paper are not exclusive in any sense. Many children exhibit overlapping, mixed and/or multiple handicapping conditions; they maybe, for example, both emotionally disturbed and learning disabled or deaf, blind and retarded, etc. For such children, individual education programs must reflect the appropriate content, programs or services applicable to the child's various overlapping conditions; they must, in effect, be suited to the child's unique needs.

While this paper has implied that no placement, content or service is universally applicable to all handicapped children, one essential reality has been suggested which binds all special educators - that is, the absolute necessity of meaningful parental involvement. If our programs are to succeed with handicapped children across categorical areas, if indeed, we are to successfully fulfill the instructional goals specified in our individual education program statements, we must commit ourselves to cooperative parental involvement in every aspect of our educational programs. In the final analysis, it is only this type of involvement, one that effects a working partnership between parent and special educator, which can assure us that any specific handicapped child's education will be truly appropriate.

"THIS HAS TO BE THE MAINSTREAM!"

ADJUSTIVE AND ADAPTIVE GOALS IN SPECIAL EDUCATION

Introduction

Any balanced view of current practices in special education must recognize that we pursue quite different programs for handicapped children in response to their specific condition. These programs are designed to fulfill distinct goals - goals which can be summarized as intellectual, adjustive or adaptive in both content and intent.

An intellectual goal orientation is of critical importance for normal, non-handicapped and gifted children. Since intellectual goals are satisfied when the full problem solving potential of the child is reached, the normal child's educational needs are best met by content which best fulfills such potential; i.e., curriculum which combines society-valued academic and practical learnings through regular classroom instruction. For gifted and academically talented children, intellectual fulfillment further requires the employment of special enrichment curricula, accelerated placement and/or non-graded school designs. In American schools therefore, intellectual (i.e., academic) concerns predominate; adjustment and adaptation are at best secondary considerations for non-handicapped children.

For most handicapped children, however, intellectual considerations are of far less importance than adjustive or adaptive ones. Even when an intellectually-oriented curriculum is used with specific types of handicapped children it is viewed as a means to a more appropriate adjustive or adaptive end - not as an end by itself. In most instances adjustive or adaptive concerns dominate our programs for handicapped children. While there has been some past confusion of the two terms, adjustment and adaptation refer to distinct entities - entities which are different not only in definition, but also in their expression as special educational goals. In its most basic sense, adjustement refers to the individual's relative ability to relate to one's own self and/or varying to fit into social contexts. Because this definition relates the individual to both self and others, it can be said to have both statistical and individual meanings.

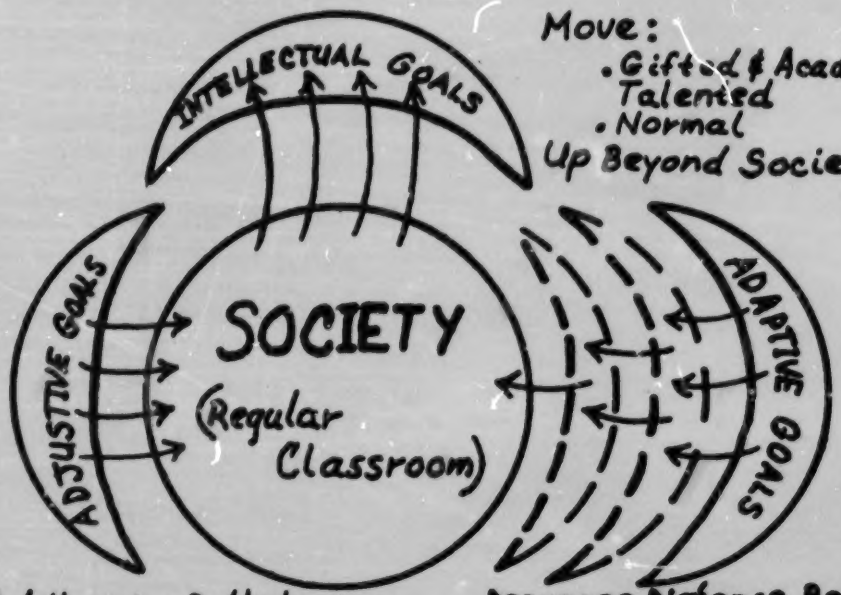
Statistical definitions employ behavioral traits which are regarded as adjustive in relation to specific behavioral norms. One can, for example, use some behavioral entity, such as the child's "relative ability to tolerate frustration," sample representative proportions of the population for the presence of this factor, note that most of the normal population can take X amount of frustration, and determine that those whose frustration tolerance is either positively or negatively extreme, are maladjusted. In actual practice, clusters of such traits comprise most statistical definitions of adjustment.

Statistical definitions form the basis for most of our current testing practices in this area. They are valid in so far as they are quantifiable, but also arbitrary, in that they call for a value judgment that such behaviors are truly symptomatic of emotional maladjustment. The central focus of this definition is upon the individual's adjustment in varying social contexts rather than upon the individual per se.

Individual definitions rely on some criteria of adjustment - such as positive self-concept behaviors, aspects of the self-actualized person, or purposive maladjustment. These definitions typically assume that behavior which is performed for its own enjoyability and/or necessity is adjustive in nature, while that which is designed to disturb or involve others in inappropriate ways is maladjustive.

The essential weakness of individual definitions rests with their use of arbitrary criteria which are not easily quantified. Nevertheless certain advantages should be noted. By relating children to themselves, as well as to social contexts, ideal definitions more closely satisfy both aspects of our original definition of adjustment. Such definitions also possess contemporary relevance, since in ideal terms adjustment requires that the individual "do his own thing," forsaking inappropriate social involvement or repression. Finally, these definitions provide an individual goal orientation (i.e., the pursuit of behavior for its own sake) which is lacking in statistical definitions.

In both individual and statistical senses, adjustment is a most appropriate goal for special education programs. Its relative fulfillment is seen whenever our programs return and/or maintain the child in as normal a functioning context as possible. This can be realized through a variety of means. Constructive parental involvement, behavior management programming, individual group counseling, mainstreaming, the use of resource or structured classrooms - all of these practices are potentially adjustive in content, for each seeks to return or maintain the handicapped child in the least restrictive placement possible.



Move:
- Gifted & Academically Talented
- Normal

Up Beyond Society

Adjust:
- Speech & Hearing Pathologies
- Learning Disability
- Emotional Disturbance

Into Society

Decrease Distance Between:
- Mental Retardation
- Orthopedic & other Health Impairments

And Society

In special educational contexts, *adaptation* refers to the relative distance between individual and basic survival requirements in any given social environment. Survival in this society, of course, is less pressing, as one's personal self sufficiency, ability, maintain good health, hold a job, manage money, be an adequate citizen, husband and parent, etc.

Adaptation is perhaps the most critical objective of special education programs, for survival concerns preempt all others in the final analysis. Adaptive goals are fulfilled when programs enhance the child's eventual adult self-sufficiency and survival capacity. An adaptive curriculum includes skills acquired in the following basic areas: self-sufficiency, motor, communication, social-interpersonal relations, basic academics, pre-vocational and vocational, basic economics, health, sex and marriage, child care and management, community resources, mobility and leisure.*

In any discussion of adjustive and adaptive concerns affecting the various handicapping conditions, consideration must be given to their distinct impacts. For this reason separate analysis of the relative importance of adjustive and adaptive factors upon each of the major handicapping conditions are provided in the following sections.

Adjustive Concerns Affecting the Handicapped

1. Mental Retardation

Maladjustment retards functioning only when it is most severe and incapacitating. Thus we find common associations between such conditions or emotional disturbances as schizophrenia, organic psychosis, infantile autism, delinquency and selected neurotic disorders. An association does not necessarily mean that a cause-effect relationship exists, however, and the various associations between aspects of adjustive disturbance and retardation can best be summarized in the following ways:

a. In many instances of associated conditions of emotional disturbance and retardation, the home situation is so characterized by socio-economic deprivation and parental mismanagement that the child is incapacitated in both intellectual and adjustive senses. Further, even where conditions of disadvantage are minimal, home situations which produce severe adjustive disturbance can also profoundly retard intellectual functioning.

b. At the same time many retarded individuals in institutional settings do not cope as well with stress as those not retarded. As Beier (1964) notes: "it seems to be agreed that the retarded child, because of his intellectual deficiency, is subject to more stresses than the ordinary child. The most frequently mentioned problems or experiences seem to be rejection and over-protection. The retardate may experience serious frustrations from consistent failures or deprivations or strong feelings of shame, guilt, and hopelessness because of his deficiencies."

Adjustive factors are also important considerations in programming for retarded children. While the major educational goal is adaptive, the importance of adjustment should not be minimized. In a complex society such as ours, one's relative survival is to some degree contingent upon the child's ability to get along with others, to cope with normal living stresses, etc. The school program must therefore prepare retarded children to be able to adequately relate to themselves, peers, teachers and parents in ways which guarantee equally smooth post-school relationships with their spouses, social acquaintances, fellow employees and employers in adult life.

In the final analysis however, adjustment is at best a limited educational goal for the retarded. No matter how well adjusted the retardate becomes, his relative survival will still be jeopardized in a complex society. While the retardate's survival skills will be facilitated by the satisfaction of adjustive needs, training pursuant to job performance, the meeting of vocational and civic responsibilities and independent life functioning itself is far more critical.

2. Speech and Hearing Pathologies

The influence of adjustive factors upon functional speech development has been the subject of heavy research for several decades. Several speech disorders have been commonly associated with maladjustment, particularly functional misarticulation, the vocal disorders and stuttering.

Like other aspects of the developmental process, speech sound learning can be adversely influenced by parental rejection, neglect, and over-protection. Adjustment is, however, only one of several factors

*A full breakdown of learnings and skills in each of these areas is cited in the previous article "Individual Educational Programming: Definitions of Appropriateness" on page 2.

which can be associated with functional articulatory, defectiveness for physical, intellectual, environmental and emotional factors all contribute to this problem.

Functional vocal disorders are attributable to vocal strain, malearning and emotional disturbance. In such cases where maladjustment is indicated, the persistence of infantile vocal patterns symptomatic of emotional immaturity and hysterical muteness are the most common problems.

Of all the speech handicapping conditions, stuttering is the one most frequently associated with emotional maladjustment. Unfortunately more than forty years of research has not entirely clarified the extent of this association. Glasner (1949) probably best described the complexities involved in this association when he noted three distinct types of stuttering causation:

a. emotionally healthy children whose stuttering began after a serious illness or trauma resulting in short-term maladjustment
b. sensitive, vulnerable children whose stuttering is viewed as a long-term response to family or school pressure
c. severely maladjusted children whose stuttering is symptomatic of more serious problems

Since speech therapy is designed to eliminate deviations in voice, articulation, language or fluency in such a way that the child's speech no longer calls attention to itself, interferes with communication, or causes its possessor to be maladjusted, adjustive considerations are obviously critical. Where maladjustment, for example, contributes to the origin of a speech disorder or determines its relative severity, it must be dealt with as part of therapy. At the same time improvement in most speech handicapping conditions will bring about positive adjustive attitudes of the past of children and their parents.

In statistical terms, speech therapy seeks to remediate the disordered speech of the child in such a way that is indistinguishable from that of other children. Where the disorder is not wholly "curable," the child and his parents are educated to accept the speech pattern as normal--thereby adjusting to the disorder in an individual sense. In either case the primary goal of speech therapy is distinctly adjustive.

3. Orthopedic and Other Health Impairments

The emotional effects of orthopedic and health related handicapping conditions vary according to the severity and type of condition, the family reaction to the handicap, and the child's perception of his limitations.

We know, for example, that peers of the handicapped child tend to react unfavorably to handicapping conditions in relation to their gross visibility. Thus, the more severely handicapped children will tend more readily toward maladjustment than the less severely handicapped, especially if they are unduly influenced by peer reactions.

The family perception of the handicapping condition is also important. When parents reject their children because of a handicapping condition, or attempt to overcompensate for the handicap through overprotection, mild to severe adjustive problems can result.

While these factors are of interest, the child's own perception of his disability is even more critical. Some authors in this area recommend that we distinguish the terms disability and handicap, suggesting that "disability" refer to the overt, specifiable limitations of the orthopedic or other impairment and "handicap" designate the child's psychologically perceived limitations which are added to the "disability."

This question of the adjustive perception of the orthopedically handicapped child is related to another problem--that of the influence of adjustive factors upon bodily functioning and health. We know that maladjustment can affect a number of medical conditions, such as ulcers, colitis, asthma, etc., but the extent of this influence is definitely unclear at present.

In view of these considerations the following summary statements can be made concerning the role of adjustive factors in the etiology and placement of orthopedically and other health impaired children:

a. Such conditions are influenced by adjustive factors to the extent that the child and his family perceive that he is handicapped beyond overt physical limitations. Such conditions do not necessarily involve maladjustment when they are accepted realistically.
b. Severe disturbances in adjustment, particularly the conversion neuroses, can result in medically crippling conditions of a totally or partially functional nature. Therapy in such cases often requires at least as much treatment of the maladjustment as the condition itself.
c. While adjustive factors influence treatment considerations in this area, they are not as essential as the adaptive needs of the

moderately to severely disabled child. For this reason adjustment is most likely to be a secondary consideration, supplementing the more important acquisition of survival skills.

d. As a secondary goal however, adjustment is a vital aspect of programming for the orthopedic and other health impaired. In this area, it is critical that children and their parents realistically accept their limitations and utilize to the fullest their impaired intellectual and adaptive abilities.

4. Specific Learning Disability

Adjustive factors play a truly paradoxical role in this area. As a diagnostic criteria, adjustment, like intelligence, functions more as a "rule-out" factor than as a definitional entity. Although many workers in this area include emotional disturbance as one of the causes and/or consequences of learning failure, the extent of their relationship is unclear. In point of fact three distinct types of diagnostic groups have been noted:

Group I- children with intact learning capacity whose failures to achieve stem from emotional or deprivational sources.

Group II- children whose impaired learning capacity is clearly traceable to learning style deficit and/or brain dammage.

Group III- children whose impaired learning capacity is manifested by visual and auditory perceptional impairment not clearly attributable to emotional or neurological sources.

The point of this distinction is that the case descriptions cited for Group I are essentially different that those cited for Groups II and III. The adjustive etiology cited for Group I is predicated upon intact learning capacity, a factor roughly analogous to Bower's (1962) criteria for emotional disturbance, which related to the child's inability to learn when all other conditions (including neurological impairment) are judged to be normal. Groups II and III, on the other hand, refer to impaired learning capacity due to neurological or perceptual causes with maladjustment essentially ruled out. For the purposes of clarity in this area it is appropriate to consider only Groups II and III as germane to the term "specific learning disability," with the further clarification that cases whose etiologies appear to stem primarily from adjustive factors are more the province of "emotional disturbance" than learning disability.

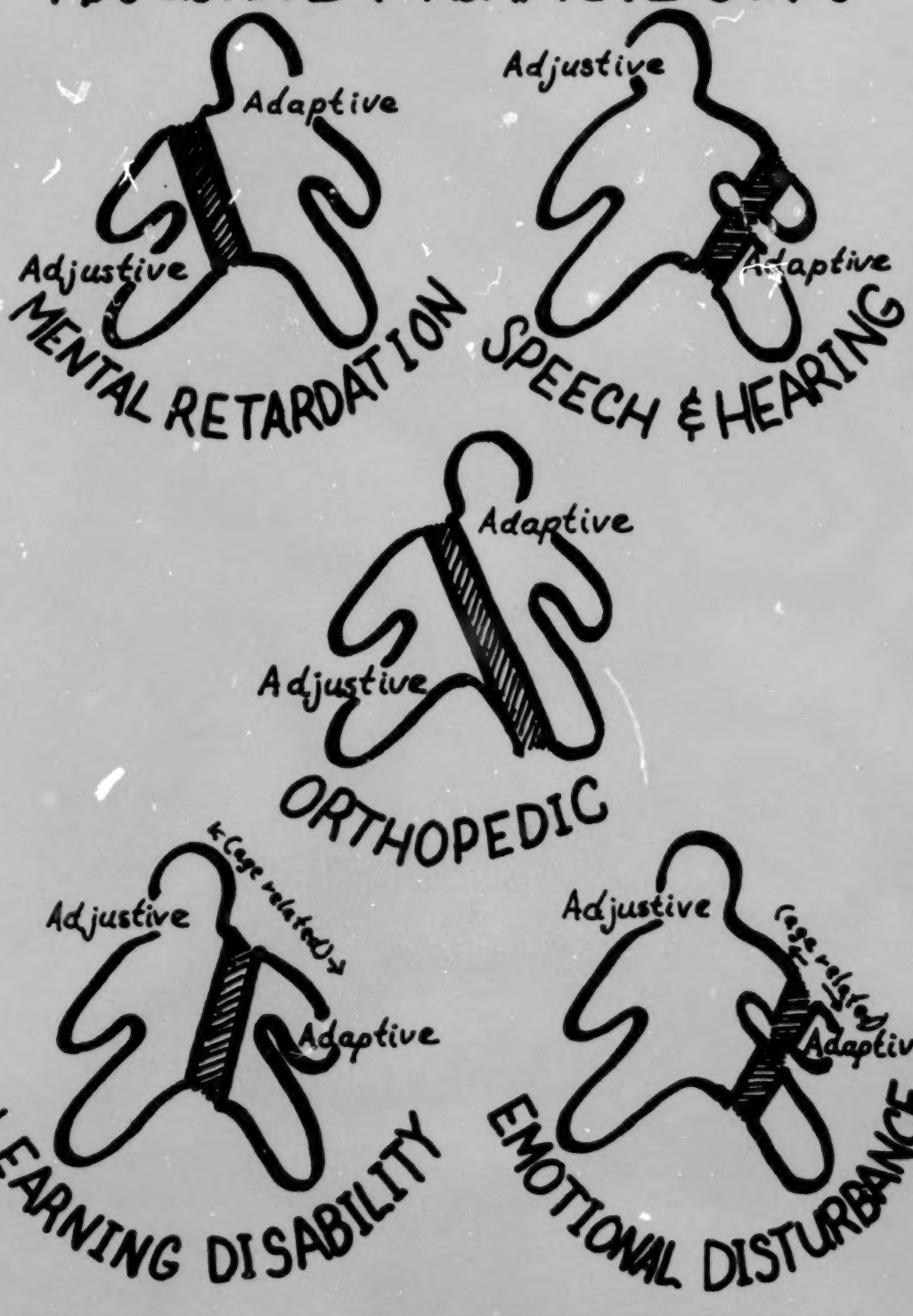
At the same time, adjustive factors strongly influence our programs with the learning disabled. Many of the Group II and III cases experience maladjustment associated with the consequences of neurological impairment and/or learning disability. In most of these cases, treatment of such adjustive problems will need to accompany the remedial process if our programs are to be effective. For this reason, and the compelling need to eventually reintegrate the child into as much of the regualr program as possible, we consider adjustment as the major curricular goal for programs affecting learning disabled children.

5. Emotional Disturbance

Emotional disturbance refers primarily to disturbances in adjustive behavior; i.e., the individual's relative inability to relate meaningfully to self and/or others form a generalized definition of emotional disturbance per se. This definitional unity directly influences our etiological descriptions of the emotionally disburbed child to the extent that any classification of causative factors in this area, such as mismanaged childraising, environmental stress or disordered personal perceptions, or their consequences, such as vulnerability, anxiety, emotional deprivation, conflict and lack of adequate coping mechanisms, are basically adjustive in content.

The adjustive role is also manifest in any treatment and placement considerations for the emotionally disturbed. If they are to be effective, our programs must be designed to enable disturbed individuals to better adjust to their personal conflicts and the acceptable demands of society. For crisis of situational problems we develop "mainstream" or resource room placements to enable children to better cope with their problems while remaining in as normal a classroom context as possible. For cases which are more "chronic" than "crisis," our placement considerations, while tempered by the reality that the individual's behavior problems require the more intensive treatments available in special self-contained classes or residential facilities, we still plan for the disturbed child's eventual reintegration into more normal classroom and social environments. In either case, the educational goal for such children is essentially adjustive for the realization of intellectual potential, the promotional academic achievement and even job success as merely vehicles which enable the emotionally disturbed better adjust to themselves and their society.

ADJUSTIVE & ADAPTIVE GOALS



Adaptive Programming for the Handicapped

1. Mental Retardation

The federal definition of mental retardation includes "associated impairments in adaptive behavior" as one of its major criteria. In our society the most cirtical factor in treatment for mentally retarded children and adults is adaptation. It is not so much that retarded individuals will not survive as adults, but rather that their survival will be too contingent upon state and local agencies, professional organizations and private charities. In effect they will be too dependent upon others for their very survival.

For this reason the basics of survival in our culture, such as the learning of career and vocational skills, job maintenance, proper money management, the assumption of civic responsiblity and the promotion of personal, marital and parental stability must strongly influence the curriculum of any program designed to educated retarded children. When such learning are incorporated into fully articulated school programs encompassing grades K-12 and beyond, the post school survival of the mildly to severely retarded children is enhanced.

The essential point here is that our programs only effectively help retarded children when they emphasize primarily the acquisition of basic survival skills, not academic ones. Studies showing higher rates of academic achievement for the retarded child in regular classes really miss this point--we have no evidence that such learning really enhances one's eventual adaptation in our society. What evidence we do have concerning the value of adaptively-oriented special classes and programs indicates that over the long haul, they beneficially affect post-school employment rates, facilitate marital adjustment and increase the earning power of retardates.

For all retarded children the resolution of adaptive problems should not only influence our training programs, but also society's response to the problem. We cannot continue to train the retarded to fill jobs which are being automated out of existence, thus perpetuating a welfare life style. A new response is mandated, one which involves society in the creation of meaningful employment for the retarded. The logical areas for such employment are in service categories such as child care, teacher aides, hospital attendants, food services, etc., and in necessary unskilled labor such as brush and litter clearance on public lands, non-automated factory work, heavy construction, etc. The pay for such work will need to be higher than phased-out welfare payments, with raises and bonuses for demonstrated quality work, job and social responsibilities and new skill learnings. Extension of social responsibility for the retarded can involve the private corporate sector as well, particularly through federal programs granting proportional incentive tax credits to businesses which hire handicapped adults and provide appropriate supervision and responsibility for their welfare.

Obviously mental retardation is all of our concern, not just a special educational or parental one. If retarded children are to adequately adapt themselves to the survival requirements of our society, we must not only properly train them but also change the society's perception of their value. Educators cannot continue to operate in a vacuum, assuming that their professional responsibilities end in the classroom. We are compelled to change the society if we are to help the retarded to survive. Any perception which fails to encompass this necessity mocks our expressed purpose of preparing the retarded child for full self-sufficiency in our society.

2. Speech and Hearing Handicapping Conditions

As we have previously noted, the major goal of speech therapy is essentially adjustive. Curricula or programs focusing upon survival skills for most speech handicapped children are usually inappropriate unless the specific disorder stems from severe handicapping conditions of a more global nature, such as mental retardation, cerebral palsy, etc. Structural disabilities such as deafness, aphasia, and the organic vocal disorders may require adaptive considerations insofar as the handicapping condition threatens to limit the child's future adult self-sufficiency and employability. For these cases, particularly the aphasias, the limitations imposed are quite similar to other severe orthopedic impairments — hence they require similar adaptive curricular modifications.

3. Orthopedic and Other Health Impairments

The survival requirements of most orthopedically and other health impaired children may often be similar to those of the retarded, particularly for those who are most severely disabled. In effect, the more grossly impaired the child, the more survival learning will need to be incorporated into programs designed to benefit such children. Thus many of the components of the adaptive curriculum are as applicable to the needs of severely orthopedically and other health impaired children as they are for retarded children. Like the retarded, such children will need not only basic academic learnings, but also a

curriculum designed to enchance their ultimate employability and personal, financial and social self-sufficiency. As adults they may also need created employment suited to their varied disabling conditions.

At the same time, the essential differences between retarded and orthopedically and other health impaired children should also be noted. Children whose disabilities are less than severe and those possessing average or better intelligence can obviously benefit from much of the standard academic curricula not applicable to the retarded. For these children we must not only focus upon the mobility, gross and fine motor, communications and self-sufficiency skills training found in the adaptive program, but also upon modifications of standard academic materials and curriculas which meet this specific learning requirement.

5. Specific Learning Disability - Emotional Disturbance

The relative importance of adaptive considerations for both of these exceptionalities varies according to the age of the child. At elementary and junior high school levels the adjustive goal of regular class room integration is paramount. At these levels emotional and learning problems must be treated as potentially remedial as long as such children demonstrate average intelligence.

At the high school level emotionally disturbed and learning disabled adolescents will need increasing amount of survival skills programming, especially when their problems are both chronic and severe. In such instances chronic learning or behavioral handicaps may retard academic functioning to the extent that they not only preclude reintegration into regular classes, but also the adolescent's eventual survival capacity as an adult. For these individuals adaptive rather than adjustive concerns must be given primary consideration.

Summary

This paper has considered three major aspects of educational programming for handicapped and non-handicapped children--intellectual, adjustive and adaptive. The intellectual aspect, that which seeks the maximization of the full intellectual potential of the child, dominates the curricula of American schools. It is most applicable to the needs of most non-handicapped children, including the gifted, but not suited for most of the handicapped.

The adjustive orientation seeks the integration of the child into normal social contents, including the regular classroom and the child's meaningful relationship with self and other. Such a goal is most appropriate to the needs of speech handicapped, emotionally disturbed and learning disabled children. It is at least of secondary importance to the mentally retarded and the orthopedically and other health impaired.

The adaptive thrust seeks to promote the acquisition of basic survival skills to enhance the child's eventual adult self-sufficiency in a complex society. This thrust is most appropriate for the mentally retarded, the moderately to severe orthopedically and other health impaired and non-adaptive emotionally disturbed and hearing disabled adolescents. For all other children, of course, adaptation must be at least a secondary concern, for education should at least prepare the individual to survive in society if it is to have any other meaning at all.

SECTION B

P.L. 94-142 AND ITS IMPLICATIONS

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2. Individualized Educational Programs

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P.L. 94-142: Notes for Classroom Teachers*

The following points are offered to provide teacher-relevant clarifications of P.L. 94-142, the Education of ALL Handicapped Children Act of 1975:

A. The essential purpose of this legislation is summarized in this statement:

"It is the purpose of this Act to *ASSURE* that *ALL* handicapped children have available to them...a *FREE APPROPRIATE PUBLIC EDUCATION* and related services designed to meet their unique needs, to assure that the rights of handicapped children and their parents or guardians are protected, to assist states and localities to provide for the education of all handicapped children, and to assess and assure the effectiveness of efforts to educate handicapped children."

B. To clarify each of the terms contained in this purpose, Congress provided the following definitions of specific services and programs applicable to all teachers:

1. "The term 'special education' means specially designed instruction, at no cost to parents or guardians, to meet the unique needs of a handicapped child, including a classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and institutions.

2. "The term 'related services' means transportation, and such developmental, corrective, and other supportive services (including speech pathology and audiology, psychological services, physical and occupational therapy, recreation, and medical and counseling services, except that such medical services shall be for diagnostic and evaluation purposes only) as may be required to assist a handicapped child to benefit from special education, and includes the early identification and assessment of handicapping conditions in children.

3. "The term 'free appropriate public education' means special education and related services which:
   (a) have been provided at public expense, under public supervision and direction, and without charge;
   (b) meet the standards of the State educational agency;
   (c) include an appropriate preschool, elementary, or secondary school education in the state involved; and
   (d) are provided in conformity with the individualized education program required under section 614 (a) (5).

4. "The term 'individualized education program' means a written statement for each handicapped child developed in any meeting by a representative of the local educational agency or an intermediate educational unit who shall be qualified to provide, or supervise the provision of, specially designed instruction to meet the unique needs of handicapped children, the teacher, the parents or guardian of such child, and, whenever appropriate, such child, which statement shall include:
   (a) a statement of the present levels of educational performance of such child;
   (b) a statement of annual goals, including short term instructional objectives;
   (c) a statement of the specific educational services to be provided to such child, and the extent to which such child will be able to participate in regular educational programs; and
   (d) the projected date for initiation and anticipated duration of such services, and appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether instructional objectives are being achieved."

Of these four definitions, the term "individualized education program" is most critical. Such programs require an annual written statement of program goals, services and related evaluations applicable to the individually assessed needs of each handicapped child. This statement of services must be developed in a meeting attended by a qualified representative of the school district (i.e., school psychologist, social worker, etc.), the child's teacher, parents, and, where appropriate, the child himself/herself. This section, therefore, not only mandates individualized education programming for all handicapped children, but also parental involvement in, and cooperation with, such programs.

While individualized educational program is not viewed as a binding contractual agreement for participating schools, children or parents, its components must be as specific as possible. Specifics in this context will, according to current OSE regulations, include statements of:

*From an informal handout developed by Dr. Edward J. Kelly

1. The child's present levels of educational performance, including academic achievement, social adaptation, pre-vocational and vocational skills, psychomotor skills, self-help skills, adjustive needs, etc.

2. Long-term goals, which describe the various educational performance levels to be obtained (by the end of the school year) as part of the child's individualized educational program;

3. Short-term instructional objectives/areas of individual need which represent measurable intermediate steps between the child's level of functioning and perceived annual goals;

4. Specific educational services needed by the child, such services to include:
   (a) specific educationally relevant instruction;
   (b) specific pathology and audiology;
   (c) psychological services;
   (d) physical and occupational therapy;
   (e) counseling and guidance services for pupils, parents and teachers;
   (f) medical services;
   (g) adaptive physical education and recreation;
   (h) special instructional equipment, materials and media;
   (i) vocational education;
   (j) transportation.

5. A justification for the type of educational placement provided to the child, which includes sub-statements of the placement's anticipated duration.

6. Objective criteria, evaluation procedures and accompanying subsequent data which determine whether or not both short and long term instructional objectives are actually achieved.

C. To provide sufficient funding to oversee the implementation of this Act, Congress has developed an increasing scale of appropriations applicable to public school handicapped populations. Projected total amounts are set at $378,000,000 for fiscal 1978, an amount approximately double each succeeding year until 1982, when over $3 billion will be available for funding.
The Law mandates funding for 12% of the school population from ages 5 through 17. Two percent of the total school population can be considered as seriously learning disabled under the terms of this Act. Permissive funding is also provided for handicapped children ages 3 to 5 and 18 to 21.

D. To qualify for funding under the terms of this Act, States are required to make application to the Department of Education and file a State plan which specifies:

   1. how they are to provide service for all of their handicapped children;
   2. procedures for implementing and monitoring the development and maintenance of free appropriate individualized education programs for all handicapped children;
   3. policy for guaranteeing that all test structures will be truly non-discriminatory;
   4. the establishment of procedural safeguards which guarantee that the rights of children and their parents to a free appropriate public education are protected; and
   5. programming designed to place as many handicapped children in the "least restrictive educational environment"-i.e.., regular classrooms, with specific services suited to the individual child's educational affective, social, and/or adaptive needs.

Once a State plan is approved and funded, local school districts can then apply to their State education agencies for their share of the funding. To obtain funding, their applications must also reflect all necessary specifications and safeguards contained in the State plan, including maintenance of individualized education programs, procedures for non-discriminatory testing, mandated parent involvement, etc.

E. Aside from development of individualized programs, the most important feature of this Act for teachers it its "procedural safeguards" section. This section spells out the rights of parents and their children to receive written notice of any program's proposal or refusal to initiate or change their handicapped children's identification, evaluation or educational placement.

   If parents do not agree with the content of their child's program, or any proposed change, they are entitled to a formal hearing. In such a formal hearing all parties shall be accorded:

1. the right to be accompanied and advised by counsel and by individuals with special knowledge or training with respect to the problems of handicapped children;

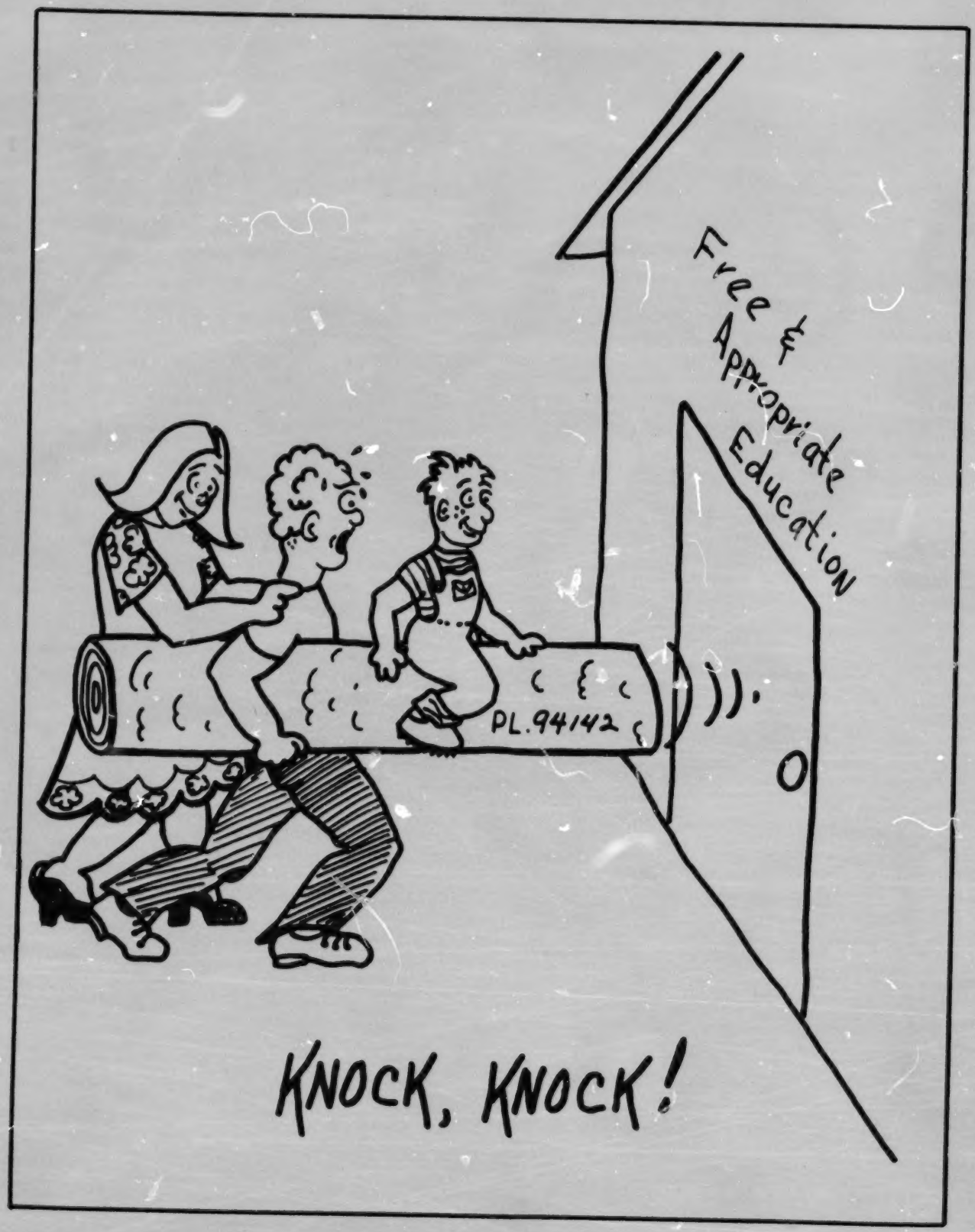
2. the right to present evidence and confront, cross-examine, and compel the attendance of witnesses;

3. the right to a written or electronic verbatim record of such hearing; and

4. the right to written findings of fact and decisions

At the conclusion of such a hearing, if either party is not satisfied with the results, the Act further indicates that they shall be afforded legal redress in any appropriate State or Federal district court. Such redress may take the form of an individual or class action suit filed to prevent the decision of the hearing officer from being finalized.

The actual intent of this entire section is to ensure wherever possible, extensive parental involvement and cooperation with all phases of the special education program for their handicapped children. This section reflects recent court decisions which have viewed education as an inalienable property right of all children, including the handicapped, guaranteed under the 14th Amendment of the Constitution.


Free & Appropriate Education
PL.94142
KNOCK, KNOCK!

the who, where and what of IEP'S*

The enactment of Public Law 94-142 has stimulated considerable activity. Books have been written, and workshops organized, in attempts to explain this legislation. The activity is not without cause, for the new law-also known as The Education for All Handicapped Children Act-is indeed complex.

As welcome as the legislation may be, many teachers and school administrators are deeply concerned about implementing the act. They are, for example, uneasy about setting up procedures which guarantee the many rights of parents and anxious about locating tests which are nondiscriminatory. However, the provision which has probably caused the most apprehension is the one which calls for the maintenance of an Individualized Education Program (IEP) for each handicapped child.

But why be apprehensive? Haven't we all known for years that individualized teaching was the way to go? Haven't we been told that children are unique and that, therefore, programs would be "fitted to their needs" so they can perform "at their own pace"? Such bromides about individualized education have been the bases for countless books and workshops, and have been bandied about the colleges of education for generations. So what's the problem?

Well, part of the problem is that although there's been a lot of talk about individualized instruction, few teachers have been able to bring it off. Because of the numbers of children in their classes or the lack of varied materials, or whatever reason, most teachers have not programmed individually for their youngsters.

To complicate matters, individualization IEP-style goes far beyond what most teachers think of as constituting individualized instruction. Its not simply assigning children to one group or another for reading or math instruction. Nor is it just anticipating that cetain children will accomplish a great deal; others, not as much; and still others, nothing at all.

Under the IEP concept of individualized instruction, teachers (and others who design programs for children) must explain in writing the many details of their educational plans. Amoung other things, they must describe what will be taught and by whom, where instruction will take place and for how long. Furthermore, those plans must be measurable and they must be designed by a group of individuals, many of whom are specialists.

Little wonder then that so much anxiety and confusion exits over IEP's. Not only have most of us managed to avoid specifying individual objectives, but when we did state goals, they defied measurement. What's more, when we wrote down those few nebulous aims, they were invariably our own creations; rarely did we seek the assistance of other professionals or parents.

The intent of this article is to explain the features of IEP's to the extent that teachers and others can develop and implement them in their classrooms. In this article we'll take a look at some of the who's, where's and what's of IEP.

Who and Where. In an effort to guarantee that various approaches will be used to assess handicapped youngsters, one of the provisions of 94-142 is that children will be evaluated by a Child Study Team (CST). Depending on the type and extent of the handicap, a CST would include some of the following professionals: regular and special ed teachers, vision and hearing specialists, school psychologist, communication disorder specialist, physician and social worker.

Following an evaluation, the CST holds a planning conference. The purposes of this meeting are to develop an appropriate IEP and determine where the child should be educated. Each school must insure that the following participants are included in the planning conference: a representative of the local educational agency, other than the child's teacher; the child's teacher, or teachers, who have a direct responsibility for implementing the program; the child's parent(s); the child, when appropriate; and other individuals at the discretion of the parent or the school district.

Based on the evaluation of the CST and the recommendation of the planning committee, a placement for the child is suggested. According to 94-142, the child must be assigned to a facility that is "least restrictive" and the rationale for such a placement must be explained. The following are some of the placement options, ranging from least to most restrictive:

- Regular class with supportive services. The child is assigned to a regular classroom. Special ed and/or other personnel assist the teacher with advice about methods or materials. The child does not receive direct instruction from the support personnel.
- Regular class with support instruction. The child is assigned to a regular classroom and receives some direct instruction in the classroom from a special ed teacher or other specialist.

*From an article by Tom Lovitt from Educating Exceptional Children 79/80.

- Regular class with resource-room instruction. The child is assigned to a regular classroom, but receives some instruction in another location from a specialist.
- Separate class, part-time, regular school. The child is assigned primarily to a special ed classroom, but receives some instruction in a regular classroom. This particular placement is possible only when the school has both kinds of classroom.
- Separate class, full-time, regular school. The child is not integrated in a regular class, but spends full-time in a special ed classroom. Here, too, the school must have both regular and special ed classrooms.
- Special class, part-time, separate facility. The child is assigned to a special class in a separate school on a part-time basis. All of the children in this facility are handicapped. The child receives some instruction, however, in a facility which has classes for regular and special students.
- Special class, full-time, separate facility. The child receives all of his education in a school for special children.
- Homebound. The child receives and educational program in the home from special ed teachers or other specialists.

The wide range of placement options provided by P.L. 94-142 should be reassuring to regular teachers. As you can see, handicapped children are not going to be arbitrarily assigned to regular classrooms, regardless of the nature or extent of their handicaps. However, there's another reason for using the various placement options here: The conditions of the child's placement figure prominently in the writing of the IEP.

What is an IEP?

In order to develop an appropriate IEP, the CST and others who participated in the planning conference must respond in writing to the following nine components which relate to the handicapped child's program:

1. Statement of current educational level. A report must be written which describes present levels of educational performance. This includes information on the child's academic achievement, social adaptation, pre-vocational and vocational skills, psychomotor skills and self-help skills.

2. Statement of goals. Written descriptions must be included of the goals to be achieved by the end of the school year under the child's IEP. These goals should be written in terms of the student and should specify clearly the desired behavior. For example, an appropriate goal would be: "The student will increase his reading comprehension skills."

3. Statement of objectives. Written statements must be provided of the short term instructional objectives, in other words, the measurable intermediate steps between the present level of education performance and the annual goals. The objectives should include the following conditions; descriptive, conditional, evaluative and temporal. An example of an objective might be: "The student will be able to answer, in writing the comprehension objectives which follow stories in *Reading for Concepts.* Book B with at least an 80 percent accuracy by the end of the quarter."

4. Statement of services. This statement describes specifically the educational services needed by the child. These must be determined without regard to the availability of those services. The statement must include a description of: (a) all special education and related services that are needed to meet the unique needs of the child, including the type of physical education program in which the child will participate; (b) any special instructional media and materials that are needed.

5. Dates of services. Statements must be included about the dates special services will begin and the length of time they'll be in effect. Beginning and ending dates will be entered for each service the child will receive. If he is to be provided assistance from a special ed teacher, a regular teacher and a communication disorders specialist, three sets of dates must be entered in the IEP.

6. Time in regular programs. Information must be furnished which details the extent to which a child will participate in regular education programs. Some children will be integrated in regular classes for only a few activities; for example, music, art and physical education.

7. Justification of placement. A written statement must accompany the IEP which supports the type of educational placement recommended for the child. School personnel, of course, must make every effort to educate handicapped youngsters with children who are not handicapped. Handicapped children should be placed in special classes, separate schools, or otherwise removed from their normal peers only when the nature or severity of the handicap is such that education in regular classes with the use of special aids and services cannot be achieved satisfactorily.

8. Responsible individuals. A list must be furnished of the names of individuals who are responsible for implementing the IEP. For some children, this list will contain only one or two names. For other children, several professionals will be included: special and regular teachers, communication disorders specialist, vision specialist and so on.

9. Evaluation plan. The IEP must include statements about the objective criteria, evaluation procedures and schedules for determining whether the short term instructional objectives are being achieved. The objectives must be evaluated at least once a year. For example, if the objective was to increase a child's ability to comprehend, he might be required to answer in writing, each day, the questions following a story from a specific book. His answers would then be checked against a key. This information, along with other facts provided earlier in our example of an objective, would inform the reader about the criteria, procedures and schedule for evaluating the attainment of objectives.

Hopefully, this brief description of the who, where and what of IEP's will help ease your apprehensions over this provision of P.L. 94-142. Writing an acceptable IEP isn't the easiest thing you've ever done, of course, but at the same time there's nothing in an IEP that need scare any teacher.

PL 94142
"READ ME MY RIGHTS!"

INDIVIDUAL EDUCATION PROGRAM

Child's Name John Doe Birthdate _____ Grade _____

School Dover Date Referred to Committee 8/30/79

SUMMARY OF PRESENT LEVELS OF PERFORMANCE

(1) John scores well below grade level on Standardized Achievement Test in the area of Math. He has difficulty with multiplication involving regrouping.

(2) John seems to exhibit a very low self esteem as noted by testing from the school psychologist. John seems to get discouraged easily and expresses hostile feeling toward peers. He has difficulty establishing relationships with peers.

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LONG-TERM GOALS - in order of importance

(1) The student will develop multiplication skills requiring regrouping.

(2) A. The student will become aware of his useful and valuable characteristics as a person.

B. The student will develop behavior which will help him establish and maintain appropriate relationships with his peers.

Name Doe, John

Goal Area Social Skills Developer: Resource Room Teacher

Materials Teacher made activities

Sequence Steps	Short Term Objectives				Measurement Procedures
	who (learner)	will do what (observ. behavior)	in what setting/stimulus (conditions)	at what level (standard)	
1	John	will list 5 things he can do now which he was unable to do at age 9	in small group setting consisting of teacher and peers	Maintaining appropriate behavior	Teacher observation
2	John	will list all characteristics descriptive of himself	given a list of 30 personal characteristics	maintaining appropriate behavior	Teacher observation
3	John	will choose one of his strong characteristics and list at least three advantages of same	in small group setting consisting of teacher and peers	maintaining appropriate behavior	Teacher observation

Name Doe, John

Goal Area Math

Developer: Regular Classroom Teacher

Materials Arithmetic Step-by-Step & Real Life Math Series

Sequence Steps	Short Term Objectives				Measurement Procedures
	Who (learner)	will do what (observ. behavior)	in what setting/stimulus (conditions)	at what level (standard)	
1	John	will compute 5 multiplication problems	2 digit x 1 digit multiplier	100% accuracy	check daily assignments
2	John	will compute 10 multiplication problems	2 digit x 2 digit multiplier without regrouping	90% accuracy	check daily assignments
3	John	will compute 10 multiplication problems	2 digit x 2 digit multiplier requiring regrouping	90% accuracy	check daily assignments
4	John	will compute 10 multiplication problems	3 digit x 3 digit multiplier requiring regrouping	90% accuracy	check daily assignments

PLACEMENT DECISIONS

ELIGIBLE FOR PLACEMENT IN: Special Education Resource Room

PERCENT OF TIME IN REGULAR CLASSROOM	PERCENT OF TIME IN SPECIAL CLASSROOM PLACEMENT
90% of regular school day	

COMMENTS

The committe recommends that a review of John's progress be made each 9 weeks for possible 100% placement in regular classroom setting.

Parent/Guardian Consent

I agree with the Individual Education Program as stated and I will meet periodically to review my child's progress.

Parent/Guardian _____ Date _____

I do not agree with the Educational Program as recommended and I request a school level administrative review.

Parent/Guardian _____ Date _____

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COMMITTEE MEMBERS PRESENT

Mr. & Mrs. John Doe, Sr. (parents)

Mrs. Wright (teacher)

Mr. Smith (principal)

Mr. Jones (resource room teacher)

Mrs. Brown (school psychologist)

DATES OF MEETINGS

9-15-79

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SECTION C

ASSESSMENT OF EXCEPTIONAL CHILDREN

1. Screening for Instruction and Referral 35

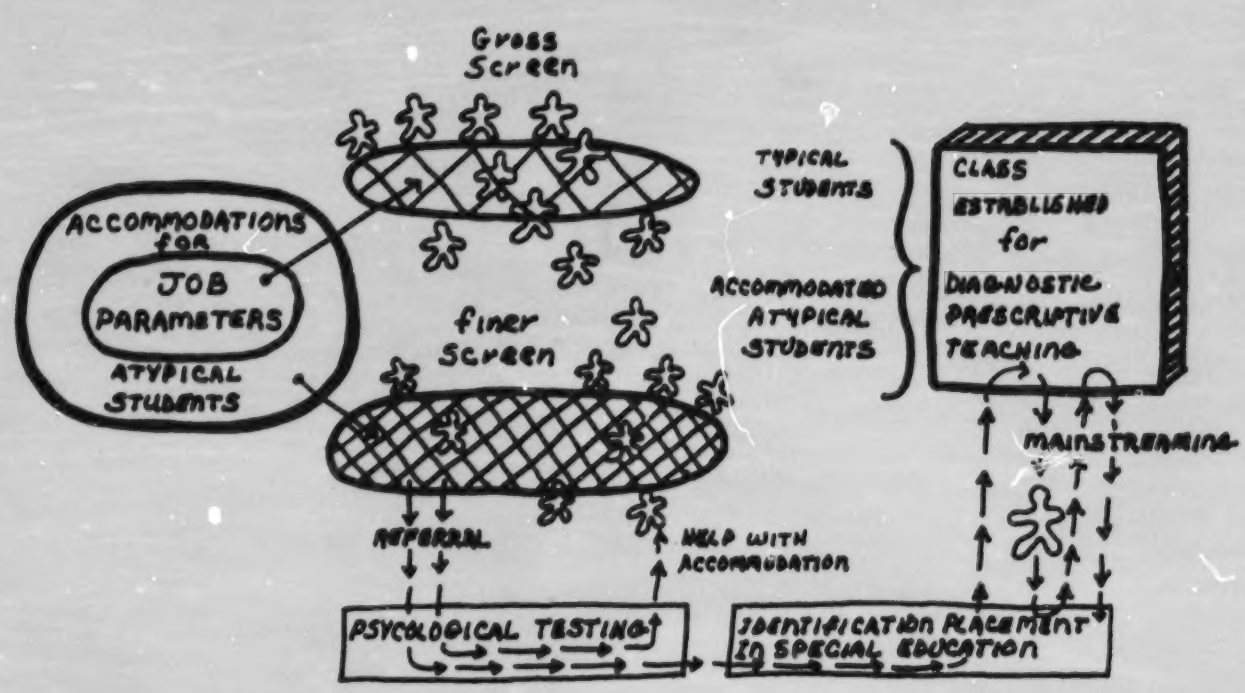
2. Sources and Uses of Information for Special Education Placement 41

3. Standardized Tests Commonly Used for Psychological Evaluation.....43

4. Notes on Diagnostic Prescriptive Teaching.....49

5. Notes on Task Analysis.....54

SCREENING FOR INSTRUCTION AND REFERRAL



The first consideration for the regular classroom teacher is examination of *job parameters*--that is, a job description with carefully defined limits for typical students and situations. A sample description of *job parameters* might read like this:

1. I am a fourth grade teacher (ninth grade teacher of_____) employed by_____ School District.

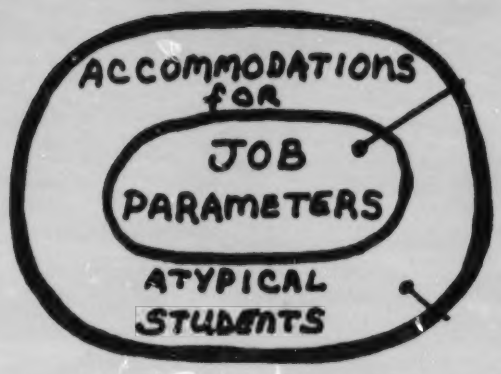
2. I am expected to follow_____ curriculum guides and management systems.

   a. This means I will teach_____ skills and_____content.
   b. By the end of the year I'm expected to attain the following with by pupils:

      1. 80% or more will have scores of 5th grade (9th grade) or better on_____test.
      2. 90% will reach_____level in_____.
      3. all will be exposed to_____ in Science.
      4. etc.----------

3. I will have the following room, equipment, supplies, aide, materials, series of books,_____ _____

4. Particular stress (as voiced by my principal, supervisors, etc.) is to be placed upon: _____.



Now that the *job parameters* have been described, consider *accommodations to the job parameters*, that is, how far one can realistically stretch the typical boundaries to accommodate atypical students. A description of realistic *accommodations* might include:

1. I can group for skill subjects and work with slow groups achieving at about 3rd grade level (6th grade level) in reading.

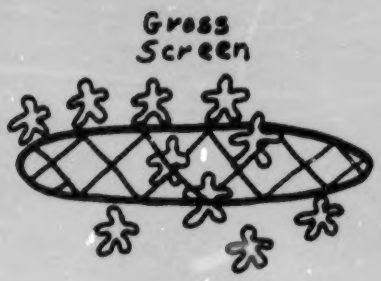
2. I can manage to work with 3-4 students who act more like 2nd or 3rd (6th-7th) grade pupils than 4th (9th) graders.

3. In content areas I can accommodate students with low reading skills in the following ways:
   a. Read the material aloud to the class or have other pupils read aloud
   b. Get easier books down to_____level with the same content
   c. Use a unit approach, learning centers, etc.

4. I can provide different types of instructions (written, demo, oral), provide more time for slower pupils, and accept different types of responses (oral test for pupil who can't write)

5. There are a number of special programs which could be utilized. (R.I.P., Speech Therapy, Counseling,)

After describing *job parameters* and *accommodations for atypical students*, screening goals become much more concrete. At the beginning of the school year, the regular classroom teacher first *screens out* those students who clearly fall within or above the typical *job parameters*--the pupils who will probably benefit from typical instruction.



The Gross Screen is composed of assessments which:

1. may be administered to the entire group at once
2. easily indicate typical grade level performance
3. may be informal teacher made tests or "quickie" standardized ones
4. may be entirely observational in nature

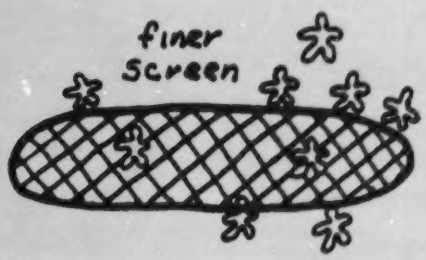
For example, during the first day or two of school, the fourth grade teacher might require the pupils to:

1. write a paragraph about their summer vacation
2. complete a Math Management System entry test or a homemade work sheet of problems most third graders should be able to complete
3. take a written spelling test (word list may be found at the end of third grade book or a standardized word list may be used)
4. copy two "fourth grade" sentences from the board and two from a work sheet
5. complete a short reading comprehension exercise (i.e. May Weekly Reader Test, or a typical comprehension work book page on grade level)

The ninth grade teacher might administer a silent reading comprehension test on a page from the textbook to determine which students are reading well enough to use the book without adjustment. He might also provide a short lecture followed by a written quiz.

During these assigned tasks the teacher would be carefully observing the pupils to determine (roughly) *"Which ones act like beginning fourth graders (ninth graders)?"*

The gross screen is used to screen out those students who obviously are right where they should be or above in terms of the teacher's *job parameters.* Once these students are identified, they may be assigned various independent tasks while a *finer screen* is applied to the students who slipped through the *gross screen.*



The *Finer Screen is representative of the accommodations the teacher will be able to make for atypical students.* The dimensions of the *Finer Screen* are determined largely by the teacher's knowledge and skill in assessment/strategies for problem areas. It is the *Finer Screen--representing accommodations for Atypical Students*--that is most pertinent for consideration. By increasing the dimensions of the *Finer Screen*, the regular classroom teacher will be better able to accommodate a greater number of atypical students, and identify those students who should be referred for formal evaluation by the school psychologist.

Typical accommodation areas for screening and curriculum include:

1. Academic performance in a given area is lower than grade level yet not too drastically so. (A *rough* guideline is up to one year lower in upper elementary - 2-3 years lower in secondary and 6 months lower in primary.) Although the *gross screen* may have indicated the pupil's functioning level, the *finer screen* utilizes individual inventories (Informal Reading Inventories for example) to pinpoint the extent of the lower academic performance.
2. Specific academic skills and *sub-skills* are deficient. The *finer screen* utilizes sub-skill tests such as The Durrell Analysis of Reading Difficulty, Key Math, or criterion reference tests to pinpoint specific sub-skill areas in need of attention. Once these deficiencies are determined, curricular accommodations may be planned (i.e., 3 fourth grade students deficient in place value might be grouped together during math period for intensive work on this sub-skill.)
3. A particular student response skill (speaking, drawing or writing) is deficient, making it difficult to assess what the pupil "knows" in a traditional manner. The teacher's *finer screen* employs tests of visual motor functioning such as the Slosson Drawing Test (draw a person) and teacher observation of handwriting.

A pupil's spoken response is assessed informally at this level, usually by the teacher's consideration of the following:

a. Do I have a difficult time concentrating on *what* he is saying because I'm so aware of *how* he's saying it?
b. Does he speak like a much younger child?
c. Is he "word poor" or inclined to totally avoid speech?

Curricular accommodations for deficient response skills will include:

a. considerations for using strong response skills in assessing knowledge (i.e., oral spelling test instead of written or written report instead of oral, etc.)
b. developing deficient response skills (i.e., visual motor program, speech therapy, etc.)

4. A particular receptive skill - visual or auditory is deficient, making it inefficient to instruct the pupil in the traditional manner. The teacher's *finer screen* in this area might include the Wepman Auditory Discrimination Test and the MWM Inventory. *Most important is an informal observation contrasting pupil performance after oral directions as opposed to performance after a teacher's silent demonstration or written directions.* It is also crucial to check vision and hearing at this point. Curricular accommodations generally include some programming in the deficient areas but *always* involve an increase in the teacher's multisensory instruction. In this manner more pupils may receive information through their strong channels.

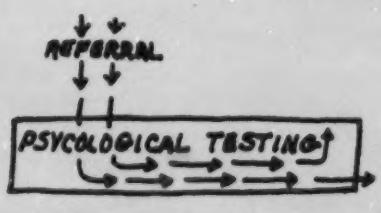
5. A pupil's rate of performance - too slow or too fast - is getting in the way of typical grade level performance. The *finer screen* in this area utilizes the same measures as the *gross screen* but the time limitations are altered. For example, Molasses Mary will be encouraged to spend all morning on the essay "What I Did Last Summer" or the silent reading comprehension test. "Quick Draw Henry" is told he will take a full 15 minutes to copy the sentences or he will do it again...and again right through lunch. Curricular accommodations for rate will also be remedial *and* compensatory. That is, Mary and Henry will receive "speed up" and "slow down" instruction, yet when a knowledge response is crucial, Mary will be given additional time and Henry will be afforded the opportunity to redo an impulsive response.

6. Pupil behavior is "too young," "too little", "too much," "too old" or "too delinquent" for the typical parameters. As in the *gross screen,* the finer screen continues to rely heavily on teacher observation. As the days pass and more situations are observed, the teacher may wish to formalize his/her observations with a Walker Checklist, Quay-Peterson, or Hewett Inventory; however, the most important part of the *Finer Screen* in this area is to try out possible curricular accommodations on various students to see whether or not they will be adequate. For example, Loud Biff and Quiet Buddy are assigned to work together, Conrad the Clown's desk becomes his office facing the wall, Daydreaming Doris gets lots of encouragement when she stays on task and the teacher instructs from a position right behind Jumping Jerry's chair (the better to hold him down, my dear!).

The Finer Screen identifies two types of pupils:

1. Those whom the teacher will be able to accommodate with what she has and/or can procure including R.I.P., Title I, Speech Therapy, Counseling, extra materials and different methods.

2. Those who still do not fit the accommodated parameters (i.e., those who have slipped through the Finer Screen).



A general rule for referral is that to qualify, a pupil should have slipped through the Finer Screen in at least two of the six areas. If only one area is deficient a greater effort for accommodation should be attempted first--perhaps by asking for additional assistance from specialized personnel. However, a referral itself is asking for additional help, so no apologies are necessary.

Once the appropriate forms are completed and processed, psychological testing may proceed. By law, a trained psychologist must administer two intelligence tests, two achievement tests and at least one other test to be selected by the psychologist from an approved list. Classroom observation and other measures are also usually included.

A typical *minimal* battery of tests to be administered to a 7-16 year old youngster might be:

Category A- 2 intelligence or related tests
WISC-R - Wechsler Intelligence Scale for Children - Revised
PPVT - Peabody Picture Vocabulary Test

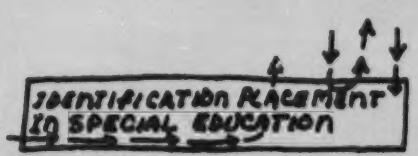
Category B- 2 achievement tests
WRAT - Wide Range Achievement Test
PIAT - Peabody Individual Achievement Test

Category C- 1 or more Perceptual Motor or Language Abilities Test(s)
Bender Visual-Motor Gestalt Test
Beery Test of Visual Motor Integration, Illinois Test of Psycholinguistic Abilities
Detroit Tests of Learning Aptitude

Plus Behavioral Assessment not necessarily administered

These tests are described in more detail on pages 43 through 48. While it is of value for the regular classroom teacher to know *about* these tests, Category A & B tests are of limited value for actual classroom programming. These two categories — intelligence and achievement — are in effect the psychologist's Gross Screen. Scores on these tests are used to answer the specific question "Is he or isn't he special education material?"

Category C tests and informal assessment such as classroom observation reports are added to the battery as the psychologist's Finer Screen. They are used to answer the question "What category of special education student is he?" Once the student receives a label such as MH (mentally handicapped) ED (emotionally disturbed) or LD (learning disabled) the Identification Process is completed.



Although precise cut off points will vary from school district to school district, the following criteria for identification are reasonably traditional:

EMH or EMR (Educably Mentally Handicapped, Educable Mentally Retarded)

Category A	Scores below normal range (quotient below 80) on 2 intelligence tests.
Category B	Scores 2 grade levels (1 in primary grades) below current grade placement in 2 areas on achievement tests (i.e., reading and spelling).
Category C	Ideally should "pass" perceptual test and behavioral assessment.

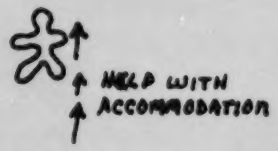
EH or ED (Emotionally Handicapped or Emoticnally Disturbed)

Category A	Scores in normal range or above on 2 intelligence tests.
Category B	Scores 2 grade levels (1 in primary grades) below current grade placement in 2 areas on achievement tests.
Category C	"Passes" perceptual test(s) - "Fails" behavioral assessment (checklist and classroom observation).

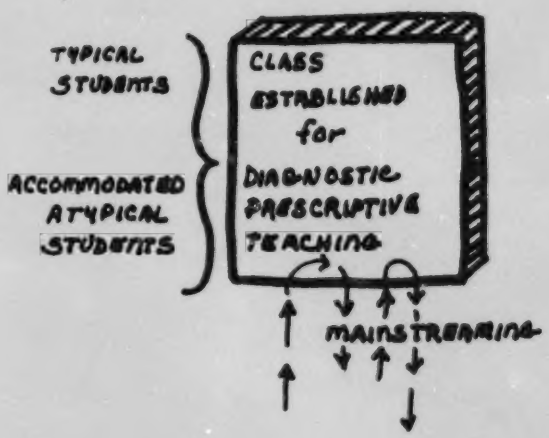
LD (Learning Disabled)

Category A	Scores in normal range or above on 2 intelligence tests.
Category B	Scores 2 grade levels (1 in primary) below current grade placement in 2 areas on achievement tests.
Category C	"Fails" perceptual test(s) -"Passes" behavioral assessment (checklist and classroom observation).

Once a pupil is identified as having a handicapping condition such as EMH, EH or LD, the process of placement in Special Education including development of an Individualized Education Program (IEP) is begun. The regular classroom teacher who referred the pupil is an important member of the Child Study Team who will carry out this task. Usually coordinated by the psychologist and/or principal, and including the resource room teacher, referring teachers, counselor, and parents, the team must rely heavily upon the input of the referring teacher. Through the screening process which led to the referral - particularly the *Finer Screen* - the referring teacher has the most educationally relevant data for developing the I.E.P.



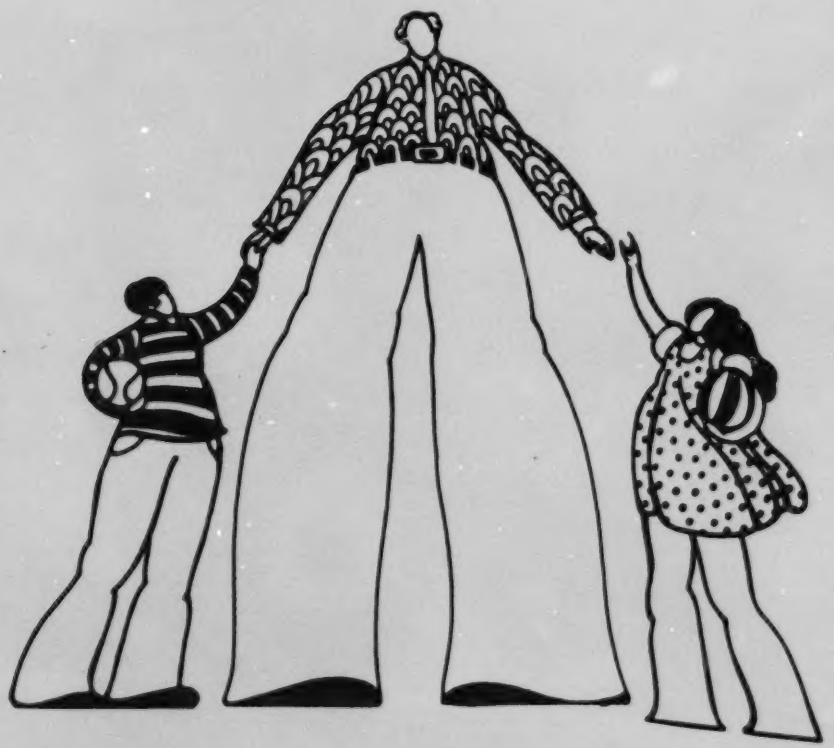
Not all pupils referred for psychological testing will meet the criteria for identification. These pupils will continue in the regular classroom with additional help for accommodation. That is, if they were judged to be outside the accommodated parameters initially and were consequently referred, specific additional help in the form of personnel, programs, methods and/or materials will be needed to expand the accommodated parameters. Providing these should be the joint responsiblity of the psychologist/counselor and the regular classroom teacher. In reality, the "work order" most often is contained in the psychologist's report, which is then "run down" by the regular class teacher. The aid of the principal, counselor, resource teacher or other special personnel is actively enlisted - usually in the form of advice related to methods and materials or special programs *not* requiring identification.



Most regular classroom teachers provide some form of the above screening procedure at the beginning of the school year. This enables them to initially establish ("know") their class to better "initiate" instruction. An "established class" consists of typical students, atypical accommodated students

and mainstreamed students - the latter spending part of the school day in resource rooms or other special education classes. However, assessment -even screening assessment - is not limited to the first few weeks of school. New pupils arrive on the scene and an original pupil may lose his/her precarious handhold on the *gross screen* or *finer screen* (i.e., continued instruction indicates that he/she is more atypical than original screening indicated).

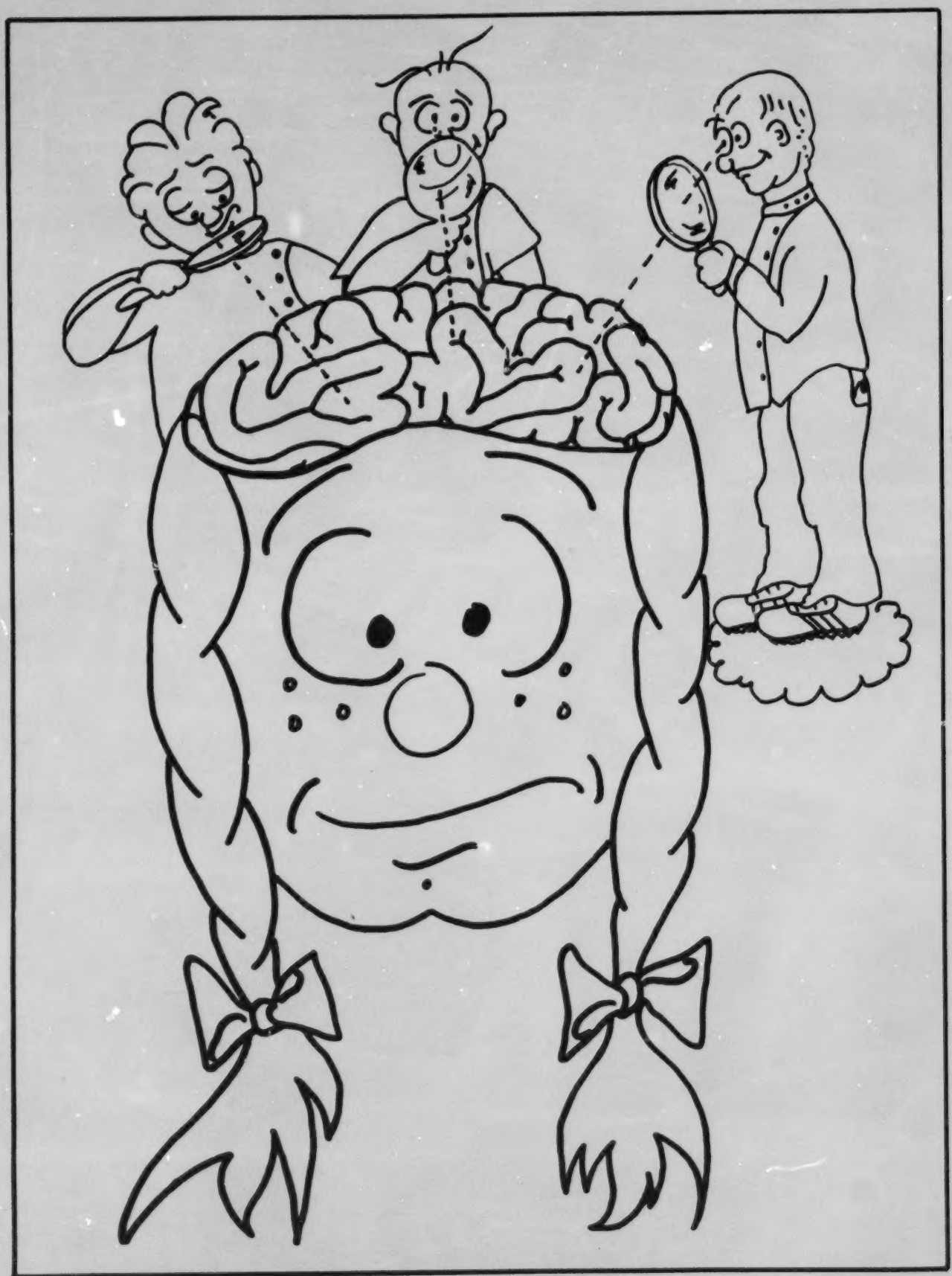
In general, the regular classroom teacher moves smoothly from screening to diagnostic-prescriptive teaching. There are no boundaries between the two since many of the assessment tools used in the *finer screen* serve to establish initial hypotheses for diagnostic-prescriptive teaching.



Sources and Uses of Information for Special Education Placement

Source	Rationale for Use
1. Referral Forms	Information contained on referral forms, if well stated, can be used to form hypotheses concerning what other kinds of information may be needed, the criteria for acceptable performance, and the perspective of the person(s) making the referral.
2. School Records	Inspection of cumulative and other available records can be helpful in determining whether or not there are factors that might help to account for the reason for referral, whether or not there seem to be any trends in problem growth, and whether other areas seem to be in need of closer evaluation.
3. Standardized Test	Standardized tests may be used to obtain information on how one child compares with other children. In many cases, standardized tests are required for determination of eligibility. This type of test covers such areas as intelligence, achievement, and personality.
4. Developmental Scales	These scales compare areas of child development within the child and as compared with other children. They are especially useful with younger or more severely handicapped children, pinpointing both strengths and weaknesses.
5. Criterion-Referenced Tests	This type of test places the child at a certain level in some area of skill development. It is especially helpful for planning purposes because criterion statements can be used as goals for instruction.
6. Observation	Observational data can focus on a very specific child characteristic, such as a child's interaction with other children, and can point out areas in need of further evaluation and confirm or disconfirm other information. Observations may be formal or informal and include such things as anecdotal records, interaction analysis, checklists, and rating scales. These observations may take place in any setting, including the home. Observational data is best obtained by those who are close to the child in his/her normal environment.
7. Interviews	Interviews with the parent, the child, and/or the teacher yield information which lends perspective to other kinds of information. They also pinpoint areas that may be priority needs or strengths.
8. Work Samples	Work samples are similar to criterion-referenced testing; they provide information concerning the level of the child in some area of skill development. They are useful in planning intervention in academic areas.
9. Consultants	Consultants may provide information which is not usually available to an educational planner. This may include medical therapeutic, and family information and may be used to plan services in related areas, define limitations on other planning, or identify areas of major need.

From a Resource Manual published by NASDSE.



STANDARDIZED TESTS COMMONLY USED FOR PSYCHOLOGICAL EVALUATION

Introduction

In assessment, a variety of psychometric techniques are utilized by various professionals. There are literally hundreds of tests and standardized procedures currently on the professional market. However, there are a few which are generally utilized with the majority of referrals for psychological evaluation. Some of these with which the classroom teacher should be familiar are briefly reviewed next. (Modified from Milliken, 1977).

Category A--Intelligence and Related Areas

It is important to note that no test or observational system will measure actual potential. Ability is inferred from performance under given conditions. For example, intelligence tests measure problem solving *behavior,* not intellect (problem solving *potential*).

Wechsler Series

The four tests in the Wechsler series, as they are used today (The Wechsler Adult Intelligence Scale--WAIS, The Wechsler Intelligence Scale for Children--WISC, the Wechsler Preschool and Primary Scale--WPPSI, the Wechsler Intelligence Scale for Children - Revised--WISC-R) were developed from the model established in the Wechsler-Bellevue Scales. The main difference between the four tests is the age group for which each was designed. All of the tests in the Wechsler series are designed in the same format of six subtests in each of two major areas: verbal and performance. A full scale IQ, a score of general intelligence, is also given.

WAIS--The WAIS was developed from the original Wechsler-Bellevue Scales. It is designed for use with adults ages sixteen and up. Since the WAIS is for adults, it will not be discussed here, although it may be used with some older students. The subtests in the WAIS are similar to those in the WISC.

WISC--The WISC was developed for children from the ages of five through the end of the fifteenth year. Since it is the most commonly used Wechsler Scale for school-aged children, it will be more thoroughly discussed.

WPPSI--The WPPSI was developed for children from the ages of four to six and one-half. Most of the subtests are similar to those in the WISC with the exception of Animal House, Geometric Design, and Sentences. Descriptions of these subtests will follow the WISC.

WISC-R--This 1974 revision of the original WISC was developed for children from the ages of six through the end of the sixteenth year. It is very similar to the WISC, but some significant changes were made.

The WISC was published in 1949 and standardized on white children. The revision, published in 1974, was standardized on both white and non-white children. Seventy-two percent of the items from the WISC are retained in the WISC-R. There were some changes in terminology used to describe particular IQ ranges. Some examiner directions and demonstrations are altered in the WISC-R. Sattler (1974, p. 542) stated that most information available for interpreting the WISC is applicable to interpreting the WISC-R.

The subtests of the WISC are divided into two areas, verbal (language) and performance (visual-motor). The verbal subtests are Information, Comprehension, Arithmetic, Similarities, and Vocabulary. The Digit Span is an optional verbal subtest. Performance subtests are Picture Completion, Picture Arrangement, Block Design, Object Assembly, and Coding. Mazes is an optional performance subtest.

The teacher should note that Wechsler constructed his test on a different basis than that of the Binet. One significant variation in Wechsler's test was that he dispensed with the concept of mental age. He also regarded intelligence as being comprised of several subskills, rather than one general global factor. His test was, therefore, designed to test several specific areas; and he arranged the test not by age levels, as did Binet, but by skills, or content scales. The examiner could then determine how proficient the subject was at verbal tasks, or performance items (visual-motor tasks) by looking at the score received on that particular subtest.

The Wechsler series also differ from the Binet in that all subjects begin with simple items and progress to more difficult ones. There are two places to begin almost every subtest, one for young children and one for children over eight years of age. All children continue answering test items until they miss a specified number of items. At this point, the particular subtest is stopped, and the child continues to the next subtest.

From a published pamphlet by Millikin, 1977

Peabody Picture Vocabulary Test

The PPVT was designed to test children between the ages of two and eighteen. It may be administered by a psychologist or by a person trained in psychological testing. The test is administered individually and usually requires approximately fifteen minutes for administration.

The child is presented with a series of pages, each of which contains four pictures. He is required by the examiner to point to the picture that the examiner names.

For example, he may be presented with a page which shows in one quadrant a spider, in a second quadrant a whale, in a third quadrant an eagle, and in the fourth quadrant a giraffe. The examiner says, "Show me eagle," without pointing to the page. The child points to the picture that he believes responds to the stimulus word spoken by the examiner. In this case, he would point to the picture of the eagle and receive credit for that response.

The score is then computed. The total number of pictures correctly identified by the child is determined and taken into consideration with his chronological age, a quotient score is derived. This score is labeled an I Q score. Although the Peabody was developed as a short form of an intelligence test, there are drawbacks to using such a small sample of behavior to assess intelligence. Its major use is one of assessing receptive-language ability (Lerner, 1976) (Sattler, 1974).

Lack of success on this test may be due to poor comprehension of spoken vocabulary, lack of background experience, or an inability to perceive the visual pictures correctly.

CATEGORY B--ACHIEVEMENT

Wide Range Achievement Test (WRAT)

The WRAT may be administered by psychologists, teachers, or other trained personnel. It has two levels. Level I is used with children ages five years through eleven years, eleven months. Level II is administered to ages twelve through adulthood. Both the arithmetic and spelling subtests are timed. The test takes between twenty to thirty minutes to administer. The test may be given in its entirety on an individual bases. While the spelling and arithmetic subtests may be administered to groups of children, the reading subtests must be administered individually.

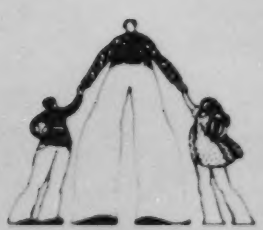
The WRAT contains three subtests, reading, spelling, and arithmetic. The reading subtest requires the child to recognize and name letters correctly and to recognize and pronounce words properly. The child is presented with one page of the test booklet on which are letters and words. He is required to read them aloud one at a time to the examiner. The subtest does not test for reading comprehension, since the child is only required to pronounce a word correctly to receive credit.

The spelling subtest requires the child to copy marks and lines resembling letters, to write his name at the easier level, and to write single words from dictation at the higher level.

The arithmetic subtest requires the child to count, read number symbols, solve oral problems, and perform written computations.

Scoring

There are three types of scores which result from administration of the WRAT: the grade equivalent score, the percentile score, and the standard score.



The grade equivalent score is reported in a decimal form. For example, 3.5 would be third grade, fifth month. A child scoring 3.5 in the reading subtest would recognize and pronounce words about as well as average children in an average third grade classroom, halfway through the school year. The grade norms were derived from the mean grade levels of the children in the normative sample, and the authors note that these may not be precise grade placement measures.*

The percentile score is a rank score. A child with a percentile score of 50 is just at the average for children of that chronological age. For example, a child with a percentile rank of 75 can be said to have done as well or better than 75 percent of the persons to whom he is being compared. It is possible for two individuals' raw scores to vary tremendously although both are at the 99th percentile. There is less distortion in the middle ranges (25-75).

The standard score has a mean or average of 100, with the distribution of the standard scores similar to that of an IQ score. For example, average classification would be a standard score of from 90 to 109. A high-average classification would be a standard score of from 110 to 119, a a low-average score would be 80-89. One valuable aspect of the standard score is that it can be compared directly to the IQ score. If the child's present class placement is in the correct grade for his chronological age, the teacher can compare the child's IQ score with the standard score for each area of academic achievement. The teacher can then determine whether or not there is a gap between his potential and performance.

For example, a child with an IQ of 110 should have a standard score approximately within that range. If the standard score were 80, this would indicate to the psychologist and to the teacher that a rather large disparity between scores exists and that possibly this child is learning disabled.

Since the WRAT may be used to test children from five years of age through to adults, it is evident that the number of test items for each grade level is limited. For example, if a child can recognize and pronounce 15 letters of the alphabet and two letters from his name, he is scored as reading at the first grade, second-month level. Most first grade teachers would agree this is misleading. When the WRAT is individually administered, it may help the psychologist to assess the general grade level at which a child is performing, but it does not test enough items, at any given level, to establish specific strengths or weaknesses of preferred modalities of learning.

Peabody Individual Achievement Test (PIAT)

This test is administered individually by a variety of professionals, psychologists, teachers, and trained paraprofessionals. The test is not timed and takes from thirty to forty minutes to administer.

The PIAT is normed for children from kindergarten through to adults. The purpose of the test, as set forth in the manual (p. 1), is:

> "to provide a wide range screening measure of achievement in the areas of mathematics, reading, spelling, and general information. Results can assist the examiner in selecting the appropriate diagnostic instrument for a particular subject matter."

The PIAT contains five subtests, reading recognition, reading comprehension, mathematics, spelling, and general information.

The reading recognition subtest at the earliest levels requires the child to match one or more letters of the alphabet and to pronounce letters of the alphabet. In the later levels, the child is required to recognize and to correctly pronounce words presented to him on a stimulus page. For example, the child is required to read the following words: run, jump, play, and others.

The reading comprehension subtest requires the child to look at a stimlus page and to read a word or sentence silently. The examiner then exposes the second page which has four different illustrations. The child is asked to select the picture which best represents the meaning of the sentence just read.

For example, the child reads, "See the boy with the hat." He is then presented with four pictures, a girl in a hat, a boy looking at a hat, a boy in a hat, and a girl holding a cat. The child must select the correct picture by pointing to it.

The mathematics subtest consists of multiple choice questions, each with four options. The items test early skills such as matching and discriminating shapes and numbers to simple sums.

*Specifically, W.R.A.T. grade level scores are consistently elevated at least one grade level above actual classroom functioning. For example, a W.R.A.T. Reading subtest score of 2.5 indicates an actual reading level of approximately 1.5 (Primer). Teachers who do not make this necessary adjustment will be providing frustration level materials to their student.

Later items test more difficult problems and measure advanced concepts in geometry and trigonometry.

For example, the child is asked, "How many pennies are the same as a nickel?" He is visually presented with four choices, 10, 25, 5, and 15. He must select the correct response.

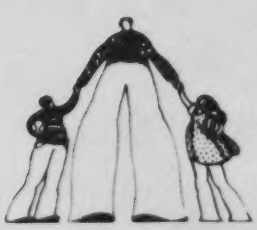
The spelling subtest consists of multiple choice items designed to test skills from those of kindergarten level through adult. The initial level of this subtest requires the child to identify a specific letter of the alphabet from others by pointing to it as the examiner says the name of the letter. Later in the test, individual words are pronounced and used in sentences by the examiner. The subject is required to point out the correct spelling for each word from among four choices.

For example, the child sees a stimulus card with the following words printed on it: sentence, sentants, sentance, sentense. The child must point to the correct spelling of sentence after he has heard the examiner say the word and use it in a sentence.

The general information subtest consists of questions which are read aloud by the examiner. The subject must answer orally. This test measures general knowledge.

For example, "What happens to seeds after we plant them in the ground?" or, "From what animal do we get the eggs we eat?"

Caution: P.I.A.T. scores reflect performance soleiy on the tasks described above--tasks which are not necessarily the same as classroom tasks. For example, the Spelling Subtest requires that the youngster select a correctly spelled word from misspelled ones by *pointing to the correct choice.* This task cannot be equated with weekly written spelling test performance--particularly for youngsters with handwriting deficiences.



CATEGORY C--PERCEPTUAL MOTOR AND LANGUAGE ABILITIES

Bender Visual-Motor Gestalt Test

The Bender must be administered by a qualified psychological examiner. Although it is used for projective purposes, the test, as examined here, is scored by the Koppitz (1963) method and is used to determine problems in visual-motor perception. The test is normed for children from the ages of five through adult.

This test consists of nine geometric forms for the child to copy. They are presented to him one at a time or in a group. Some examiners prefer to have the child copy one figure on a separate piece of paper; others ask that he arrange all nine forms on one sheet of paper.

The Koppitz (1963) scoring method is the one most frequently used for visual-motor assessment. The child is rated on the number of errors. A score of zero indicates that he has made no errors (a perfect score). The maximum number of errors is twenty-five. The child is scored on copying the figures correctly with the proper positioning on the page and orientation of shapes (Bender, 1938, and Koppitz, 1963). He may lose credit or commit an error for distorting the shape of the design, for rotating it (for example, turning it at a forty-five degree angle), for failing to integrate angles and sides properly, and for a tendency to draw significantly more than is presented, e.g., see dot pattern illustration below. the psychologist should indicate whether or not the score is appropriate.

The Beery Development Test of Visual-Motor Integration

The test may be administered individually or to children in a group. Children are required to copy the forms in a workbooklet with a pencil. Erasing is not allowed. This test may be administered by a psychologist or a trained teacher.

The Beery Test of Visual-Motor Integration was developed to assess how well the child is able to "integrate visual perception and motor behavior" (p. 12, Beery, 1961). The test consists of 24 geometric forms which the child is asked to copy, one at a time. All children start at the most basic form and work until they fail three forms in a row, at which point the test is stopped. The forms range from simple to complex.

Illinois Test of Psycholinguistic Abilities (ITPA)

The ITPA was developed and normed for children between the ages of two and one-half and ten. It should be administered by a psychologist or a professional trained in intelligence testing and administration of the ITPA.

The test must be administered individually. It was designed to analyze children's learning problems and specifically pinpoint areas of strengths and weakness which can provide diagnostic information in planning remediation for a learning disabled child.

The ITPA evaluates three major areas of psycholinguistic performance. They are channels of communication, levels of organization, and psycholinguistic processes.

The channels of communication may best be described as the modalities used for taking in information and expressing it. The visual-motor channel is that whereby the student receives visual stimuli and makes a motor response. The child who looks at a picture of a house and points to the roof when requested is utilizing visual input (picture) and making a motoric response (pointing).

The auditory-vocal channel requires the child to hear an auditory stimulus and make a verbal response. The child who is asked "What is your name?" and responds "Tim" is utilizing the auditory-vocal channel.

There are many variations of this type of processing. Auditory-motor and visual-vocal are other possible channels of communication, and there are combinations of stimuli (for example, visual and auditory) and responses (vocal and motoric).

Psycholinguistic Processes--Language processes evaluated are decoding, association, and encoding.

The decoding process is a receptive one. Does the child understand or recognize what is presented to him visually and auditorily?

The associative process is one of integration and organization. Can the child compare and relate this auditory or visual stimulus to others he knows and has learned?

The encoding process is an expressive function. Can the child express his ideas verbally or by gesture or movement?

Levels of Organization--Two levels of organization are presented in the ITPA framework, the automatic and the representational.

The automatic level mediates activities which require the child to retain and remember linguistic sequences, execute automatic habit-chains, and make closure.

The representation level mediates activities requiring meaningful and symbolic use of language.

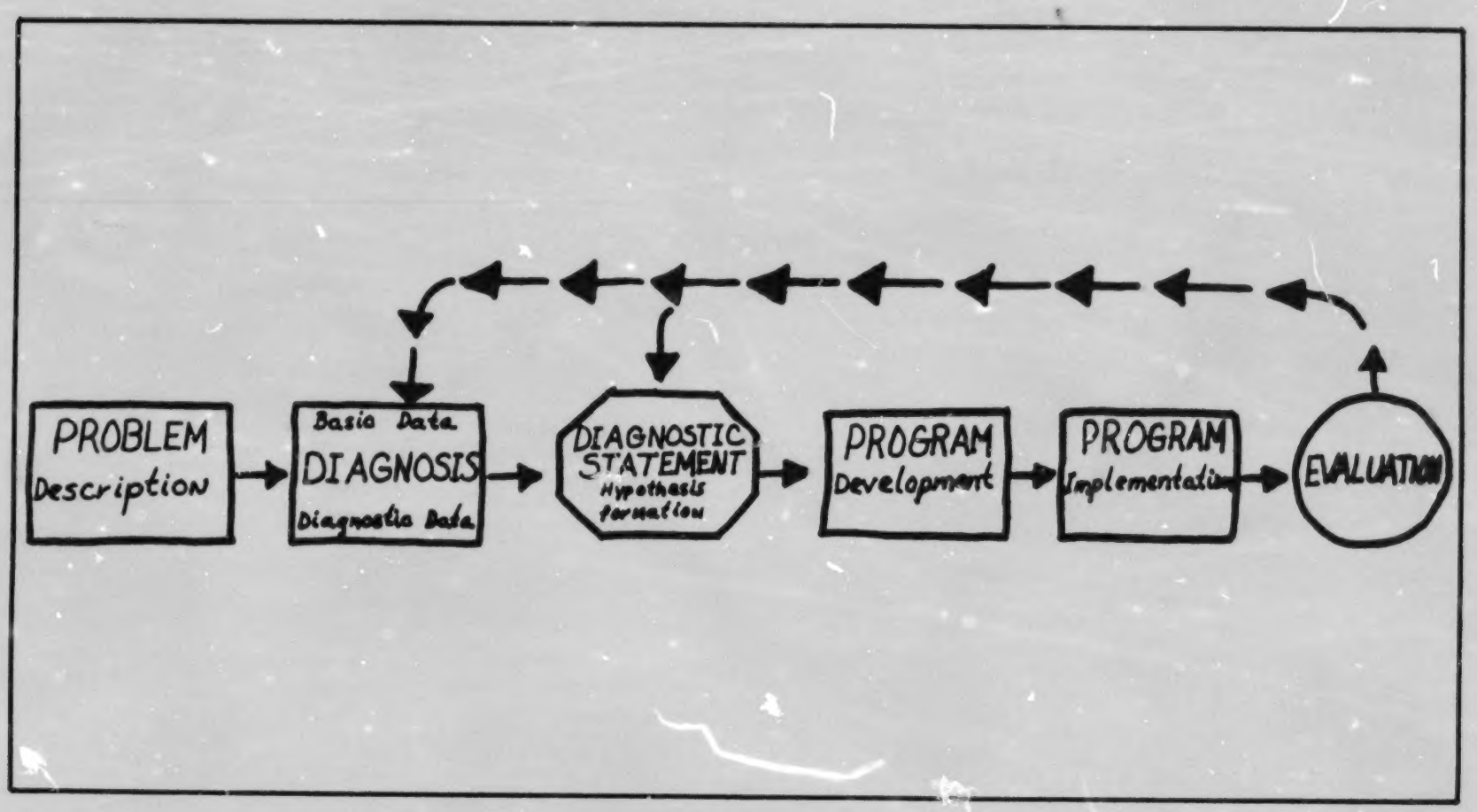
Detroit Tests of Learning Aptitude

The Detroit Tests of Learning Aptitude consist of nineteen subtests, normed for children from the ages of three to fourteen, and can be used with older adolescents. The number and selection of the subtests varies depending on the age of the child taking the test. A minimum of nine subtests is administered and a maximum of thirteen subtests is recommended.

The tests may be administered by a psychologist, teacher, or other personnel trained in testing procedures. They provide a measure of IQ, but are primarily used to pinpoint strong and weak learning modalities in a child or adolescent.

Summary

The major purpose for presenting the above test descriptions is to present a clearer picture of the post-referral psychological evaluation--**not** to encourage the classroom teacher to administer them. Although some useful programming data may be gleaned from these tests--particualarly those in Category C, their major function is in the area of identification. Placement programming and development of I.E.P's is better served through the use of observational techniques, informal measures, criterion referenced tests and application of task analysis.


PROBLEM
Description
Basic Data
DIAGNOSIS
Diagnostic Data
DIAGNOSTIC
STATEMENT
Hypothesis
formation
PROGRAM
Development
PROGRAM
Implementation
EVALUATION

Notes on Diagnostic-Prescriptive Teaching*

Diagnostic-prescriptive teaching is a term used to describe a procedure for implementing individual instruction. Although this procedure is quite common in special education, the basic model may be adapted for regular classrooms. This series of notes is designed to acquaint the regular classroom teacher with a diagnostic-prescriptive teaching model and its implications for regular classroom use. A sample diagnostic prescriptive teaching model appears on the preceding page.

There are many different models employing a variety of terms and steps, but all of them have certain points in common:

1. There are problems affecting the child's functioning in the regular classroom.
2. These problems/strengths may be described, diagnosed, and related to educational performance.
3. An educational plan may be developed from the diagnosis which will facilitate educational performance.
4. The educational plan may be implemented.
5. Evaluation of pupil progress while implementing the plan is frequent and ongoing.
6. Insufficient pupil progress or goal attainment will result in repeating the process (diagnosis, planning, implementation and evaluation.)

Problem Description

Children are referred for psychological evaluation for numerous reasons and by different persons. Referrals may come from parents or from professionals in related fields such as psychologists or physicians; however, the majority come from the classroom teacher through the screening process. This is especially true for the mildly handicapped child.

Moran (1978) suggests that there are three distinct groups of mildly handicapped children who place demands upon the regular classroom reacher:

1. Children who may need additional services from ancillary personnel (such as the speech therapist, counselor, or physical therapist;)
2. Children at risk of academic failure—where the teacher sees the need for assistance from support personnel through consultation on methods and materials; and
3. Children at risk of academic failure—where the teacher sees the need for the child to receive regularly scheduled services on an on-going basis, i.e., resource room, reading program, itinerant tutor program, etc.

All these children will require accommodation in the regular classroom and/or referral if the accommodation appears too extensive to be feasible. Accommodation and referral both start with the following question: IS THERE A PROBLEM AND CAN IT BE DESCRIBED?

1. Does the student have a problem(s) affecting school performance?
2. Does the problem(s) lend itself to forming **answerable** questions?
3. Can the questions be stated in a precise manner?
4. Do the problem-questions come directly from what is already known about the student?
5. Is it a pupil problem rather than a teacher problem? (i.e., behavior is disturbed rather than just being distrubing to the teacher, etc.)

If the above questions may be answered affirmatively, there **is** a perceived problem and diagnosis begins. Fine screening in the classroom will have determined whether the diagnostic work should begin with a direct referral for psychological evaluation (see pp 35 to 40). Diagnostic-prescriptive teaching, as it is described here, will emphasize classroom diagnosis leading to instructional planning.

Diagnosis

Classroom diagnosis is based on the questions derived from problem description. Typical questions might be: "When did the problem first appear?" "How severe is it?" "What other existing problems may relate to the first problem?" "How severe are they?" "When did they start?" "What has been done about the problem(s) with what degree of success?" and "What strong areas exist which might be used to help overcome the problem?"

From an article by John C. VanVactor

Two types of data are collected during diagnosis: 1) **Basic Data** relating to historical developmental and physical aspects of the problem(s) and 2) **Diagnostic Data** gleaned from teacher administered tests, teacher observation, and the psychological evaluation (if one was given.) The first type, **Basic Data,** requires compilation of existing information from 1) interviews with parents and others, 2) school records, and 3) pupil work samples. Health records and developmental history are often combined in a typical infomal case study format. In addition, special types of assessment outside the school setting are often initiated at this level (i.e., neurological, ophthalmological, optometric, dental, physical, audiological, and the like.)

Examination of compiled **Basic Data** sets limits for the second type of diagnosis, Diagnostic Data. In actual practice, however the two types of data are often collected concurrently. Both depend heavily on teacher observation which will receive major emphasis below.

Observation

Observation of behavior as it occurs in the natural environment has numerous advantages for the teacher engaged in assessment. When used appropriately, it provides information not obtained through standardized testing measures. This data includes the student's approach to an activity, language usage in different situations, creative reactions and problem solving behavior, self-concept, social skills with peers and adults, and general emotional development. Observation provides the only means for assessing the student's abilities as he interacts with his environment in the natural setting. Daily monitoring pinpoints consistencies in behavior eliminating possible misconceptions from a one-shot testing situation in a strange environment. It can be extremely effective as a screening device, alerting the professional to possible areas for further assessment and subsequent problem prevention measures. Further, progress which may not show up on standardized measures may be documented through observations. This is particularly important for providing information about young handicapped children's development.

Perhaps the most important asset of observation is its provision of information on student functioning, noting specific areas of strength and weakness. Such information tells the teacher what the student can do far better than the standardized test, for observation can be more closely geared to the child's classroom performance.

Another advantage of observation for all aspects of Diagnostic Prescriptive Teaching is its availability to the classroom teacher. It enhances screening, the setting of objectives, monitoring and evaluating progress, providing a profound contribution to I.E.P. development and other C.S.T. procedures. Further, it enables parents to become partners in this process by encouraging data gathering through parental input.

Focusing on both the child's behavior and the situation is important if the teacher is to choose the most appropriate type of observational procedures. In using any observational technique, the criteria or behavior must be well defined and stated in observable and objective terms to lessen the effects of subjective interpretation. It is important that the teacher know developmental sequences and patterns, as well as having training in observational procedures to minimize the effects of potential bias and mis-information. Some cautions should be noted concerning observational methods. Observation can encounter some difficulties through:

a. procedural problems involving the use of appropriate behavioral codes for data recording;
b. time factor problems, including time consumed in getting to know the whole child through documentation of baseline behaviors;
c. cost factor problems, (including personnel time costs and the use of special recording materials and equipment such as videotape recorders); and
d. observer bias problems which affect observational reliability and validity.

Given appropriate control of these problems, however, observation remains an invaluable assessment tool for the classroom teacher and all other educational professionals.

The nature of the problem being assessed will both dictate and limit the nature of the information needed, but no amount of data will answer all questions. In the end, the teacher and/or team must determine that sufficient data has been obtained to proceed with hypothesis formation.

Hypothesis Formation-Diagnostic Statement

Based on the available data from various sources, the teacher (or team) formulates statements of how and why the student is functioning and dysfunctioning the the school setting. This formation of hypotheses provides direction for the pupil's educational program. The purposes of diagnostic-

prescriptive teaching and the requirements of P.L. 94-142 require a diagnostic statement leading to programming and remediation. Classification, although it may facilitate general communication and administration, is insufficient for programming. (i.e., a classification of "Learning Disabled" provides few clues for instruction.)

There is no fixed outline for organization of information or data, but usually strengths and weaknesses of a student will be reported systematically. One possible outline for needs is cited below; however, it should be noted that not all areas should necessarily receive equal emphasis. Areas of hypothesis formation are largely determined by job parameters--those of the regular class and/or special education program in which the student will be enrolled.

I. Academic

- A. Language Arts
  1. Listening & Speaking
  2. Reading
  3. Writing & Penmanship
  4. Other
- B. Mathematics
  1. Arithmetic
  2. Other Forms
- C. Other

II. Emotional

- A. Self-esteem
- B. Independence/Dependence
- C. Mastery/Competence
- D. Control

III. Personal-Social

- A. Self-care
  1. Personal Needs
  2. Home/School
- B. Interactions

IV. Cognition

- A. Concepts
  1. Self
  2. Objects & Events
  3. Space/time
  4. Quantity
  5. Causality
  6. Symbol Systems
- B. Memory
- C. Evaluation

V. Perception

- A. Area
  1. Visual
  2. Auditory
  3. Haptic
- B. Type
  1. Discrimination
  2. Figure-ground
  3. Closure
  4. Form
  5. Spatial Relationships
- C. Motor-match

VI. Movement

- A. Gross Motor
  1. Balance & Posture
  2. Laterality
  3. Body Image
  4. Rhythm & Control
  5. Control
- B. Fine Motor
  1. Ocular Control
  2. Eye-hand Coordination

For the regular class teacher engaged in diagnostic-prescriptive teaching, the final diagnostic statements (based on hypothesis formed through diagnosis) generally follow two rough guidelines:

1. They begin with statements of **how** the pupil is functioning academically and emotionally-socially.
2. They progress to **"why"** statements involving some or all of the other four areas.

In the final analysis assessments are utilized to answer a fundamental question: Can a description of how the student functions in all relevant areas be stated? Stated another way, **"Can a diagnostic statement be made?"**

Program Development

Based on the diagnostic statement and the student's perceived needs, modifications in placement and curriculum are generated. Such modifications may be minimal, i.e., restricted to changes in the regular classroom and curriculum without further assistance to the classroom teacher, or maximal, i.e., special classrooms, curriculum and teachers involving little or no contact with the regular program. Obviously, there are many possibilities between the two extremes, part time resource room or mainstreaming being the most common. The general rule is to maximize accessibility (regular class placement) and minimize restrictions (special class placement). P.L. 94-142 and Section 504 both set legal limits on programming for handicapped children.

Prescriptive programming may be formalized in an I.E.P. or it may be an informal procedure used by the classroom teacher to select methods and materials which will meet the needs of the student and facilitate his learning. Hammill and Bartel (1978) have suggested a number of variables which influence selection of educational materials and resources.

Variables

Curricular	Student	Teacher
1. Content area	1. Needs	1. Method
2. Specific skills	2.Level of functioning	2. Approach
3. Theories and techniques	3. Grouping	3. Time
4. Methodology	4. Programming	4. Training
5. Modification	5. Methods	5. Education
	6. Characteristics	

The variables listed under **Curricular** and **Teacher** are job parameters to be considered throughout the diagnostic-prescriptive teaching process. Those variables listed under **Student** deal with the finer screen (article 1, this section) and/or the data gleaned from student diagnosis.

The basic program development receives direction from preceeding hypotheses (diagnostic statements). It was determined **how** the student was performing in various areas and **why** statements were formed to implicate possible causes. Programming in diagnostic-prescriptive teaching attempts to develop weak areas implicated in the **why** statements. If, for example, it was hypothesized that faulty auditory processing (a **why**) was contributing to low reading skills (a **how**), auditory processing would receive emphasis in programming.

Program Implementation

Program implementation is an integral part of the diagnostic-prescriptive teaching model--the part which requires individualized or personalized instruction of the child. In the regular classroom it is not always possible to provide reasonably consistent one-on-one instruction by the teacher. In some situations, aids may be available or peer tutoring may be employed; however, personalization of the curriculum to fit the student's educational program **can** be accomplished. For example, if it is known that the pupil has difficulty with auditory processing, class instructions may be demonstrated as well as presented orally. In this way the individual may associate the auditory instructions with the visual demonstration, thereby strengthening the auditory deficiency.

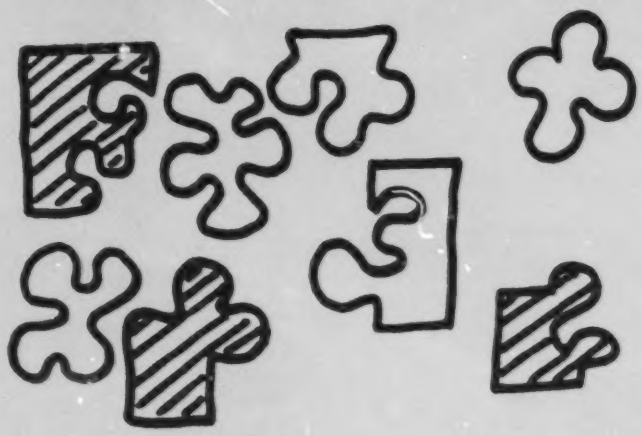
Through observation of the program in operation, further data is obtained leading to revised hypothesis formation and/or additional assessment. This refinement of the educational program is ongoing and constant leading to perpetual feedback and subsequent revision. In this respect, it is difficult to determine where implementation stops and evaluation begins since the two are so closely interwoven.

Evaluation

In diagnostic-prescriptive teaching, student, program, and teacher are all evaluated. This evaluation may be **on-going** for considering program changes or it may be **final** in terms of decision-making. ("Was the program a success? Is there a need for placement change?") Any and all of the assessment techniques previously suggested may be utilized for evaluation. The IEP goals in particular lend themselves to student and program evaluation.

The students' present skills may be compared with is initial performance to note changes leading to teacher or program modification. (This same procedure may also result in a decision to change nothing.) In any event, the major concern of evaluation is to increase the probability of student success through chartng progress. The placing of blame for success or failure wastes time that could be better spent in constructive program alteration. Evaluation is an on-going process and may lead to entering any level of the model at any time. The teacher may return to problem description, diagnosis, hypothesis formation, program development, or program implementation and proceed through the chain again. This feedback-reentry chain establishes diagnostic-prescriptive teaching as a dynamic process capable of meeting the changing needs of special students.

TASK ANALYSIS



Notes on Task Analysis

All teachers who teach handicapped students should be skilled in task analysis. Task analysis involves developing, selecting and/or adapting skill sequences that will lead from the students current functioning level to a future mastery level.

There are four reasons why teachers of the severely handicapped should use task analysis. These reasons also apply to teachers of the moderately and mildly handicapped:

1. Task analysis **generates skills sequences.** These sequences delineate starting points, terminal objectives and enhance the possibility that essential component skills will not be neglected. For example, task analysis is used to derive long term skill sequences (sequences encompassing a period of years). By establishing these long term skill sequences the potentially deterious effects of changes in teachers and administrators on long range instructional programming is minimized.
2. Task analysis and the resulting skill sequences facilitate instruction that is **tailored to individual functioning.** That is, within the skill sequence model, mastery of component skills of an objective can be assessed before instruction and students need only be instructed on skills they lack and for which they have mastered the prerequisite skills. In addition, students can be permitted to proceed through the skill sequence at their own pace, taking longer on trouble spots and skipping component skills on which they demonstrate mastery.
3. Well-defined skill sequences across skill areas (self-help, language, play, social) may be used to **precisely delineate student functioning levels within each skill area.** A precise delineation of students' current functioning levels on a variety of skill sequences is more relevant to the development of viable instructional services than the use of such descriptions as autistic, severely retarded, trainable, psychotic, emotionally disturbed, and low MA.
4. Use of task analysis and the resulting sequences facilitates the development of more efficient classroom programming.

Task analysis is an informal diagnostic procedure that can be applied to many different kinds of teaching situations. Teachers can task analyze worksheets, tests, and skills such as shoe tying to determine what the child must do in order to complete them.

Task analysis is isolating, describing, and sequencing subtasks. When task analyzing, use an action verb and an object, e.g., "pick up kleenex." Task analysis also involves **only** observable behavior. This is behavior that can be seen, heard, measured, or counted.

Don't attempt to make any inferences about what goes on "inside" the child.

a. For example, try not to use a term like "visual discrimination." A term like that doesn't tell us much. There are many definitions of it. Also it is hard to measure if the child has problems in this area or not when it is just stated as "visual discrimination."
b. However, if we state the term in more observable language such as "can match lower case 'b' with another lower case 'b' when lower case 'd's' are also present," then we can see the child perform that task.
c. We've changed a statement of a task from something we were guessing went on 'inside' the child's brain to a task that is observable.

Let's say we wanted the child to read the word **mat**. Our objective was that he would say the word out loud within three seconds of seeing it with 100% accuracy. He couldn't do it so we decided to gather some informal diagnostic information about why he couldn't by applying the task analysis process.

The task analysis of **mat** is:

a. Attends to teacher and task.
b. Demonstrates an understanding of the key words in the directions. (These are the directions the teacher gives the child. For example, "Read this word." the child would have to demonstrate an understanding of the words "read," "this" and "word.")
c. Demonstrates left-to-right sequencing (He knows he reads a word by moving his eyes from left to right.)
d. Matches a letter sound to the correct letter symbol (This subtask is a way of stating "sound-symbol correspondence" in more observable terms.)
e. Says the short "a" sound when he sees the letter "a" between two consonants in a three consonant letter word.
f. Blends the individual sounds into the word.
g. Says the whole word.

To use task anaylsis diagnostically, you:

a. Specify an instructional objective the child is having difficulty meeting.
b. Break it into subtasks.
c. Construct a checklist with a test item for each subtask.
d. Administer the checklist.
e. Teach the child the subtasks he doesn't know:
    i. When he is able to do all the subtasks that are part of the objective, he should be able to complete the objective.
    ii. When you're teaching the subtasks to the child that he didn't know, remember to check for generalization. Sometimes, when you're teaching a child one subtask, he may learn another automatically. So, after teaching the first subtask, administer the test item from the checklist for the next subtask you're going to teach him before starting to teach it to him. It won't take long and it may prevent you from teaching the child something he already knows.

SECTION D

ACADEMIC STRATEGIES

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READING PROBLEMS AND STRATEGIES*

Problem: "I'm always hearing 'have him read materials on his level.' How do I find 'his level' when I'm not really familiar with that many reading tests and I wouldn't have time to administer them anyway?"

Strategy 1: Word Count Method for Finding Decoding Level

Use a Word Count Method while the student is reading aloud to determine if the material is easy (Independent Level), about right for instruction (Instructional Level), or hard (Frustration Level). The Word Count Method is an "on-the-spot" technique which soon becomes "built-in" allowing you to assess anyone anywhere on any reading material. You will have a built-in Independent Level Detector, and Frustration Level Detector ready to go at a moment's notice. All you have to do is:

...Memorize the following equivalents:

Independent Level = allowed to miss 1 word 50 (average)

Instructional Level = allowed to miss 1 word 20 (average)

Frustration Level = consistently misses 1 word in 10 or more

...Learn the missed-word-protocols below:

1. A word is missed when the student doesn't come up with it within 5 seconds. Count silently "thousand-and-one, thousand-and-two...thousand-and-five," supply the word, record 1 miss and continue. This type of miss includes:
   a. Substitutions (*horse* for *house*)
   b. mispronounciations (*crin* for *crime*)
   c. just sitting there waiting for you to supply it
   d. finally pronouncing it after 5 seconds.
2. When a word (or phrase) is omitted it is counted a 1 miss.
3. Pronounciation of an extra word (or phrase) that does not appear in print is counted as 1 miss.

...Practice a few time by marking a xeroxed copy of the material the student is to read as follows:

Sample Word Count

The help develop your detectors, you will need a copy / of whatever the person is going to read aloud. Mark //[20] with a slash each ten words. Use a double slash / for each twenty words. As the person reads aloud, mark //[40] each word missed within five seconds by encircling it, underlining / it or putting a check mark over it. Whatever turns //[80] you on is okay but consistency is probably a good / idea. Before the person reads sixty words you will have //[80] a very good idea if the material is on his / instructional level. Has he averaged one missed word between double //[100] slashes? You will also know if it's frustration level. Is / he averaging one miss in every ten words?

Problem: "O.K., now that I can find his level on any material, how can I use this for planning for his daily activities?"

Strategy 2: Reading Levels for Daily Activities

Independent Level. If he can read aloud with only one miss per 50 words, he should be able to use this material independently. You can turn him loose on it while you work with other students. Independent level is ideal for seatwork including worksheets, workbooks, programmed comprehension kits like S.R.A., instructions at interest centers, and supplementary reading. Run a quick Word Count with the student and the material in question, make your assignment and leave with a clear conscience.

Instructional Level. If he can read aloud averaging one miss per 20 words, he should be able to use this material with help (instruction). You--or someone serving as the instructor--will need to be actively involved in the instruction process. Instructional Level is ideal for small group work, whole group work or individual instruction. The latter need not be exclusively your responsibility if you employ the buddy system (also known as "peer tutoring").

Frustration Level. If he reads aloud consistently missing one out of 10 words or more, he is not going to be able to use this material as it was intended to be used (independently or instructionally). If it is essential that he be exposed to the content *and* an easier book (same content) is unavailable, pretend he is blind. Furnish him with a reader (you or another student), tape record the material, or have another

* From 1...2...3...Read, by Judith H. Dettre.

student demonstrate his mastery of the material by explaining the content to your frustrated reader. If none of the above are practical, have a group of children--the frustrated reader included--read the material aloud in choral reading fashion.

Problem: "I probably could work in a little instruction time for him, but I don't have the fancy methods and materials he needs."

Strategy 3: Fluency Practice

Forget the fancy methods and materials unless prescribed and described by the special education resource teacher. Consider the fact that just having him practice reading at instructional or independent level will increase reading fluency without any direct teaching or word attack skills. If you or a peer tutor simply supply the unknown words after five seconds (no "sound it out, this part of the word looks like _____," etc.) there is no danger of confusion with methods he is receiving elsewhere. It is an extremely rare problem reader who is not in direct need of fluency practice. Fluency practice may be strictly informal as described above, or more tightly structured as in the Modeling Methods presented below:

Modeling Method 1: "The Perfect Page"

Select material on independent level or as close to it as possible. Open the book to the appropriate page or paragraph, place it in front of him and say:

"You are going to read this page (paragraph) perfectly--with no mistakes. First I'm going to read it while you follow with your eyes. Then we will read it together, and finally you will read it perfectly."

For modeling the teacher or tutor reads aloud keeping the place by following along with a finger. It may take a little practice to keep your finger on the exact syllable you're reading. Also, most beginners to this system tend to read either too fast or *too slowly*. Make it natural and relaxed avoiding unnecessary dynamics. *You are the reading model.*

The second time through the page, you and the student will read aloud together. You keep the place and the pace remains natural--not too fast, not too slow. If you feel you are dragging the student along or he makes errors, point out the troublesome words several times, then repeat this step.

The final step is to have the student read the page perfectly--and *I do mean perfectly*. It must be smooth--no repetitions, no missed words corrected--nothing but one word after the other all the way through. *You must be hard-nosed about this.* As you can well imagine you might have to repeat the whole process many times before one perfect page is read.

Teachers new to this system are often sure that either: 1) it will traumatize the reader beyond redemption, or 2) a concrete reward will have to be provided for each perfect page. In practice, neither one of these assumptions is tenable. Apparently, there is less anxiety connected with repetition of the familiar page than there is with attempting to muddle through a number of different pages. In our experience, the child only displays anxiety when the teacher is pressed for time and can't work in the necessary number of repetitions and/or the teacher unwittingly displays *her* anxiety about the unusually high standards by letting mistakes slip by.

The use of rewards will not ruin the system--in fact we started out by consistently providing a reward for each perfect page. We stopped this practice when we realized how unnecessary the extrinsic reinforcement really was. You have only to observe the reaction of a problem reader when he finishes reading a page perfectly for the first time in his life to know what inner reinforcement is all about!

Modeling Method 2: 'Talking Books"

A time saving, if slightly inferior variation of the reading model, is to tape record stories on the student's independent or instructional level. You can even buy these "talking books"--a book and tape set. Working the tape recorder puts the reader in control of the number of repetitions. If you're working with a group, head sets are a necessity. But even with just one student the head set may be worthwhile. Outside of an isolation booth there's no better way to shut out the world. As you are recording, be sure to ring a buzzer or bell when the page is to be turned. In this manner the student can readily get with it again should he lose the place.

Modeling Method 3: Choral Reading

If you're working with more than one reader with the same material, have them read in unison after you read it to them and with them. The problem reader is more relaxed with this McGuffy Reader approach than reading orally by himself. Repeating for a group one "perfect page" is a real challenge.

Problem: "He can't seem to remember easy words from one day to the next. Why is this?"

Strategy 4: Criteria for Sight Vocabulary

Quite possibly his sight word vocabulary has never become automatic because the criteria for mastery is not high enough. The minimum criteria

for sight work mastery is recognition *within 3 seconds, 10 times in random presentation.* That's a *minimum* performance criteria. "Within 2 seconds 20 times" is better and "...within 1 second indefinitely" is best. Sight words must be recognized quickly, allowing the reader to reorient himself before he confronts the next unfamiliar word requiring analysis.

Another reason he may keep missing certain words is because some words keep cropping up again and again. These words are called "basic sight words," "instant words," or "100 most common words in the English language," depending on who did the study. I've done a tabulation and condensation of four of these lists to include those words which appeared on at least three of the four lists. (Yes, "The Dolch" was one of them.) The result is "120 Basic Utility Words" guaranteed to be important. *About half of all the words in books of any level are right here.* Without them, the youngster doesn't stand a snowball's chance of decoding even the simplest written material. The following is a chart of "120 Basic Utility Words".

120 Basic Utility Words

Most Important

the	one
a	good
is	some
you	my
to	go
and	see
we	like
in	make
at	this
it	had
can	no
are	was
for	get
on	two
will	they
have	she
he	did
I	am
me	after
up	may
out	now
not	

Important

as	us	red	want
be	or	play	ride
do	has	from	funny
so	our	then	too
all	said	them	yes
of	three	know	over
your	work	which	blue
but	look	where	laugh
if	run	before	well
her	when	just	order
come	very	happy	went
little	would	saw	
that	any	made	
with	there	say	
him	how	away	
by	much	got	
his	who	ran	
an	new	could	
down	came	think	
here	find	please	
about	into	jump	
been	big	where	

A final reason he may keep missing "easy" words is that the Basic Utility Words are far from easy. They are all basically short and many look a good deal alike (consider: *then* and *than* and *was* and *saw*). It takes careful visual discrimination to note the differences--much more than is required to discriminate between *Pennsylvania* and *Texas,* for example, or *bulletin* and *democracy.*

In addition, most nouns, verbs, adjectives and adverbs with concrete referents are easier conceptually than pronouns, prepositions and linking verbs--all generally abstract. If a student is a bit fuzzy in the concept department it isn't going to help his sight recognition of printed words that don't have concrete referents.

Much has been made of the fact that Basic Utility Words are/are not phonetically regular. About all that can be stated for sure is that they certainly aren't any more regular phonetically than a random sample of all other words in the English language.

Since the Basic Utility Words are not easy, it is often a good idea to start sight word practice with other words. Names of classmates are about the

easiest followed by proper nouns of all types. (The initial capital letter is a big help.) Content words as in math, science and social studies are a good bet. Other important words include Hazard Words (*DANGER, DO NOT ENTER,* etc.) and Social/Transportation Words (*LADIES, - MEN, BUS STOP, YIELD,* etc.). Although these almost always appear entirely in caps, they are important enough to put aside concerns for transfer to other reading materials. What the pupil gains is the understanding of automatic sight mastery which will transfer to "...how well I have to know *then* and *than*."

In summary, pupil understanding of automatic sight mastery is best *begun* through words easy to discriminate visually. Easy words in this context are those that vary in relation to length, use of initial caps, and configuration (*apple* vs. *cream*). It is, however, essential to move on to Basic Utility Words rapidly since they are the key to unlocking pages of print. Just don't make the load too heavy assuming that they are easy words.

Problem: "I'm an upper elementary (junior high) (secondary) teacher. Just how would I go about teaching sight words?"

Strategy 5: The "3 Words a Day" Plan

First collect a list of the words your pupil can't recognize within 3 seconds. (a cinch?!) Run through the Basic Utility Words but save room for a few words with simple visual configuration. (See Strategy 4)

When you have 100 of these words, print or type them on index cards. If you don't know manuscript writing--the straight-line-and-circle-printing common to first and second graders--you can:

1. type them with the largest print typewriter available,
2. con a friend talented in manuscript into doing them, or
3. borrow a gifted second grader.

Third, make a chart like the one on the next page--or xerox a copy--or use the page itself. You will use it to keep track of progress toward the 100 word goal. If time is no problem and you have the urge to create, you might come up with something more exotic. Assuming that time is a problem, here's how to use the chart on the next page.

... Each time he masters a word--that's 10 times within 3 seconds--write the word on the chart in one of the blocks.

... Also write the data in the block right across the page.

... Fill up the blocks, left to right across the page.

... When you reach the end of a line of blocks, move down to the next line.

... It's a good idea to have the pupil read the old words from the chart before entering the newly mastered ones.

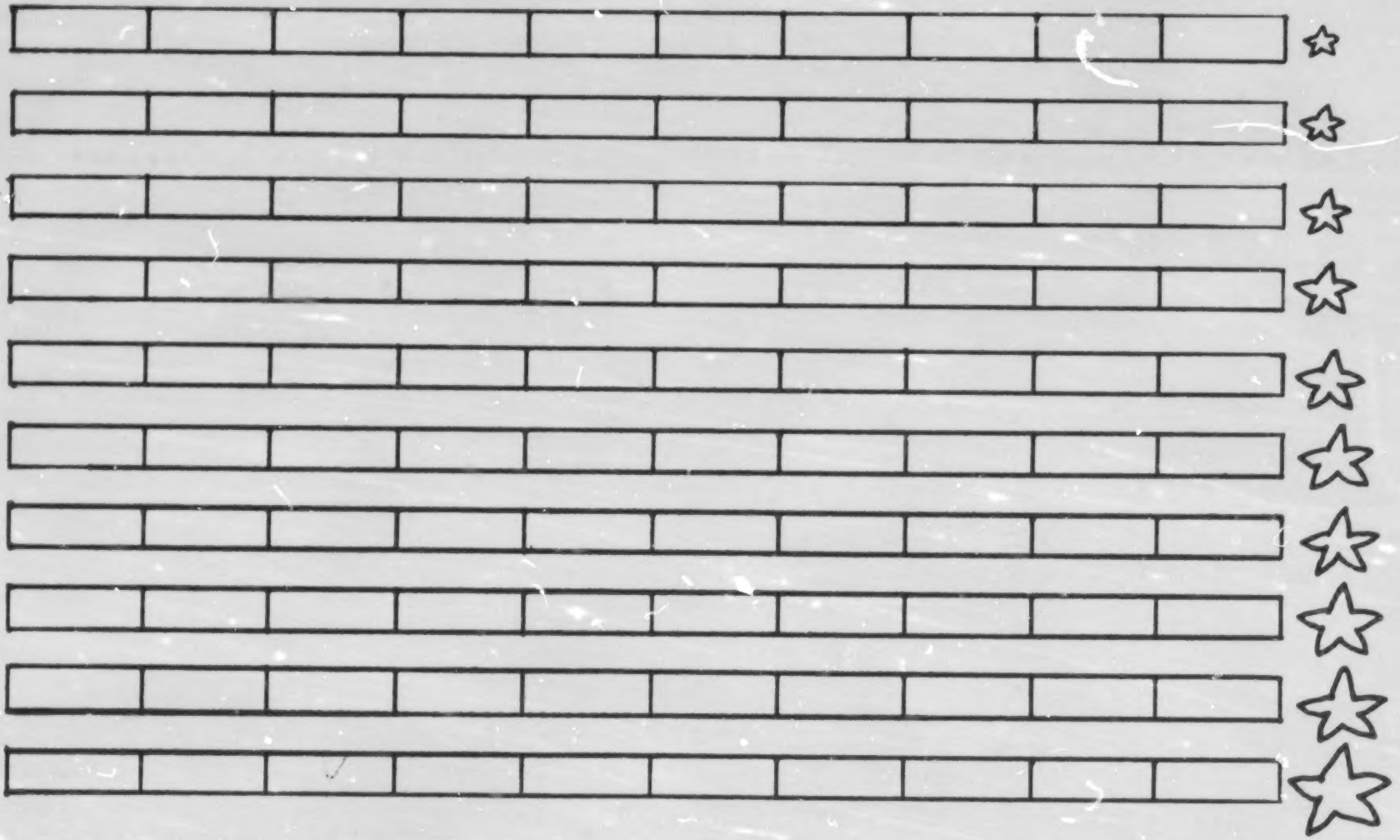
... Be sure a word is mastered before entering it.

Now you're ready to begin instruction. Explain that he is going to learn three words right now. You can have him pick the ones he wants to learn immediately, but level with him--"You're going to learn 100 words." Often older pupils are amazed at how few words they really have to learn at first, since they are not aware of the heavy repetition. Explain that he'll have to recognize them "chop-chop"--no sounding out and all that jazz. He'll just have to memorize them.

Put the first word card down in front of him and say the word (This is 'Anthony'). Let him study it a few minutes and say "How can you remember that it's 'Anthony'?. CAUTION: Make him tell you-- *don't feed him his lines.* He may be concentrating on the number of letters in a word, the pattern the different letters make, the first letter in the word, the last letter in the word, the middle of the word, the fingerprint on the card--whatever, he will notice more different cues the longer he works on the word. At this stage there are no inferior or superior cues.

After doing this with the three cards mix them up and present each. If he gets a word immediately (within three seconds), put a tally mark on the back of the card. Keep mixing them up until you have at least 10 presentations of each card. (You can often keep his interest up with a comment like "Darn, I thought I could fool you that time.") Don't rush it and allow time for more studying if he's really having trouble. Ask again, "How are you going to remember that this is 'Anthony'? ('said'?) ('election'?). Retest when he seems more confident.

THE 100 CHART



Do nothing to distract from his own unique concentration on the decoding task.

... Avoid games until words are mastered (for overlearning)

... Tell him the word if he doesn't know it within 3 seconds

... During that three seconds *do not say:*

"how does it look?"
"Sound it out"
"You remember...."
"It means the same as...."

Don't say anthing during the three seconds. When he gets the word on time, get excited about it!

Finally, give him a pep talk on how well he did. ("See, I knew you could learn these three words today.") Now bring out the 100 Chart and really make a big deal out of it. Write in the words he learned in the first spaces.

You're on your way. Often the student's learning rate will increase dramatically as he goes along. If he is able to handle six - eight - or even ten words per day--terrific! On the other hand don't let him get by with slipshod recognition. If he really knows a word he will be able to recognize it rapidly and consistently today, tomorrow--and next week.

Most people can and do learn words readily using the system described above. It is the preferred method for developing reading sight vocabulary for two very simple reasons. First, it is faster and simpler for both of you. Second, he is free to use any system which works for him in his learning. You won't be giving him cues that are not appropriate for his learning style or are different from a system he is using in a different setting.

Problem: "I just know this one slow reader in my class wouldn't learn 3 words a day that well without stronger reinforcement. Would that mess up the method?"

Strategy 6: Stronger Payola for Learning Sight Words

No. By all means try stronger and/or different rewards.

...When the pupil recognizes the next word card in less than three seconds, clap your hands or shout "terrific!"

...Or if that doesn't turn him on, promise him he can quit after he does his daily quota consecutively within three seconds each.

...Or give him the card to tear up after he has recognized it twenty times running.

...Or put an extra star or sticker on his "100 Chart" with the word.

...Or give him a bead for a growing necklace.

...Or a peanut.

It is only natural that a person who has had more than his share of failure at a task will need something to break down initial passive resistence. Keep in mind that some of the more blatant rewards like beads and peanuts will be unnecessary once he begins to consistently succeed. You can't beat success as the ultimate reinforcer. However, it is never demeaning to give praise when earned--standards will raise naturally--and keeping track of progress (charting) is beneficial to people of all ages on a number of different tasks. Can you imagine fully enjoying bowling or golf without keeping score?

Problem 7a: "There isn't anything he can read and I can't arrange for a one-to-one situation all the time. HELP!"

Problem 7b: "He's forever losing the place when he tries to read. Is there anything I can do about that?"

Strategy 7: Discrimination/Tracking Exercises

The following exercises are "two-birds-with-one-stone" activities. Tracking, the old "left-to-right progression" number, is featured along with much practice in discrimination of any element you care to isolate for practice. If your student is working on letters of the alphabet, these can be used. Sight words are obvious choices, but even the non-reader can separate and count the number of words on a page.

Another plus value of these activities is the availability of materials--most of which you are bound to have on hand. You will need pages of print that may be written on. Consider old newspapers, xeroxed copies of textbook pages, and those workbooks that he had to buy and can't read. You will also need a marking pen and possibly letter or word cards if you've selected them as elements to be discriminated.

Basic Discrimination/Tracking Exercise 1

Show the pupil one letter card and say the letter name (or sound if that's what you're after). Assuming you're concentrating on the letter t and it's name say, "This is t...What is it?...etc." Pull out a page of print, place the letter card at the top and say, "I want you to find all the t's on this page." (Point to the letter card and print as you do this.) "Start here." (Draw an X where he is to begin.) "Go this way." (Draw an arrow over the first line of print.) "Put a circle around each t and whisper "t" each time." Do the first line as indicated and show him how to return to the left side for the second line. If you feel that he may finish too soon, you might have him count the number of t's he found on that page.

Basic Discrimination/Tracking Exercise

t

X →

Show the student one letter card and say the letter name. Have him put a circle around every t on any page of print. He is to say "t" every time he circles one.

Variations:

a. The student can do the same thing with words instead of letters. Put one of his word cards at the top of a page of print and have him search for it. You can't go wrong if you use the 120 Basic Utility Words. Remember how often they show up! Have him whisper the word each time he marks it.

Variation a. Discrimination/Tracking

the

X →

He can do the same thing with words instead of lettes. Put one of the word cards at the top of a page of print. Put an X where he is to start and draw an arrow pointing right over the first line. Show him how to come back over to the left after he finishes the first line. He says the word each time he circles it.

b. Many beginning readers have trouble just trying to separate words out of a page of print. Have the student circle each word on a page--or put a dot or slash between each word--or underline each word--or mark out each word. Stress tracking, but don't have him whisper unless he simply counts the number of words as he marks.

Variation b. Discrimination/Tracking

X →

Have the student circle each word on a page -or•put•a•dot•between•words - or/use/slash/marks -or underline each word - ~~or mark out each word~~. This exercise/will/help/him/separate/out/words/from/a/page of/print. Don't have him say the words.

c. When the student knows 50-100 Basic Utility Words, give him a page of fairly adult written material. Have him underline every word he knows and whisper each. Don't put any card down. This is usually a big morale booster since the student probably didn't have any idea he knew so many words. It's also a good way to get him serious about working on the Basic Utility Words.

Variation c. Discrimination/Tracking

When he knows 50-100 Basic Utility Words, give him a page of fairly adult written material. Have him underline evey word he knows and say each one. You will both be amazed.

Problem: "The I.E.P. says that my student has a comprehension problem. Should I ask him questions after modeled reading?"

Strategy 8: Comprehension in Perspective

No! Modeling is for fluency practice--that's accuracy and rate. The student's main concern is with decoding words one after another and if you advise him that he should concentrate on the meaning too, it will detract from the job at hand. Without fluency, comprehension will always be operating on less than eight cylinders. For this reason, it is well to approach the "comprehension problem" with a healthy skepticism. First make sure that the material he is being asked to comprehend can be fluently decoded at Instructional Level. If not, drop back to Instructional Level and **then** ask him questions about what he has just read. If he can answer at least 3 out of 4 questions--4 out of 5 is even better--there is no need to hit the panic button about comprehension.

Beginning readers of any age should postpone extensive **reading** comprehension work until they are able to read silently. The ability to read without

whispering or moving the lips indicates that 1) decoding is fluent enough to handle to load of comprehending what is written and 2) your student is probably reading at second grade level or beyond in terms of accuracy. When given instructions to "read silently" a roomful of first graders will typically continue to read orally--but just a bit softer.)

While fluency is developing and silent reading is not there yet, listening comprehension is the word of the day. Ask questions about stories you have read to the class, tape recordings he has heard at the listening center and television programs he has viewed. Questioning is the teacher's number one tool for increasing comprehension whether it is in connection with listening or reading.

Problem: "And if he really does have a reading comprehension problem...what then?

Strategy 9: Developing Reading Comprehension

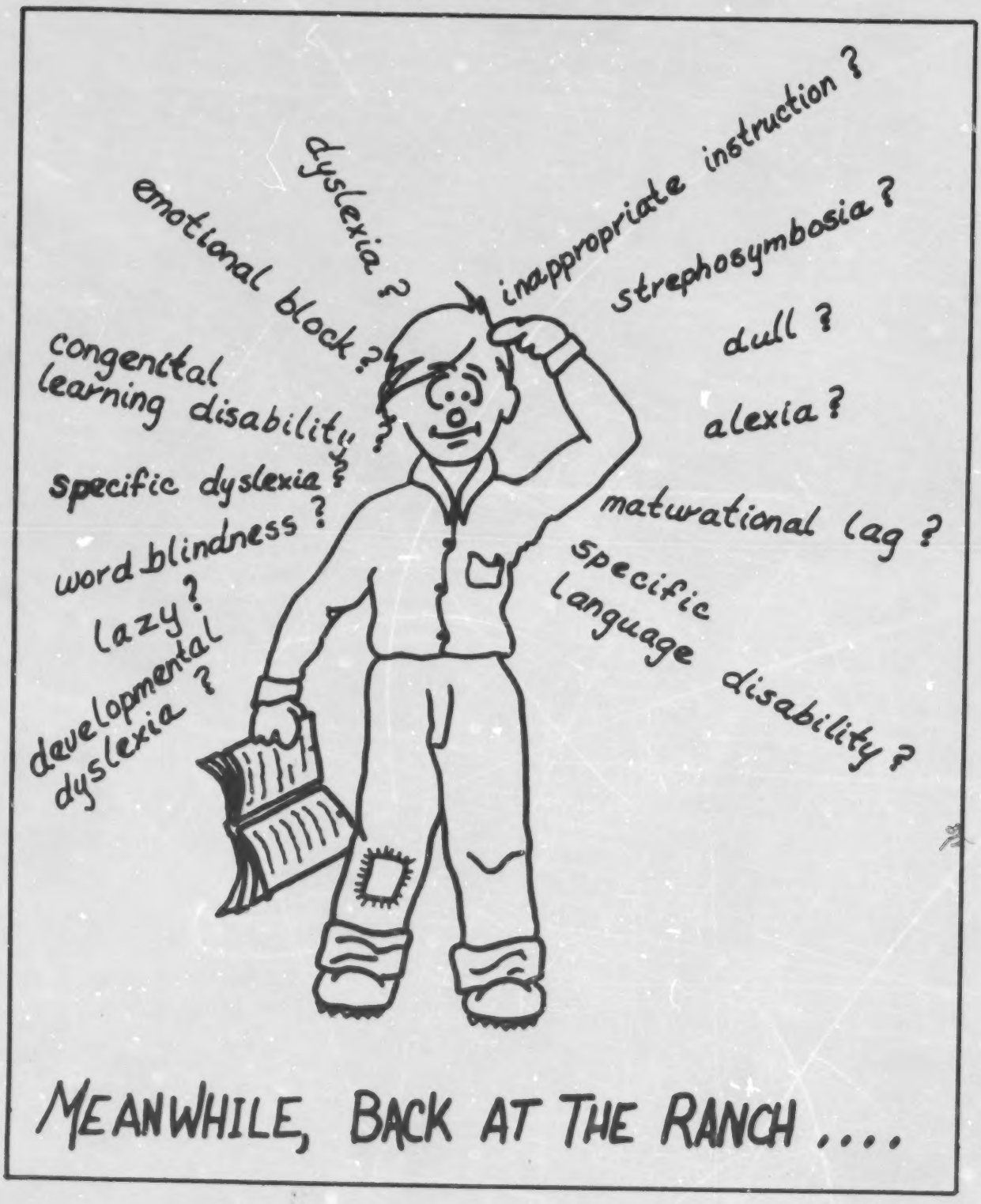
...With a basal series, complete three or four stories for fluency then start the comprehension workbook. Always keep at least **two** stories ahead of the corresponding level in the comprehension workbook.

...The Reading Comprehension subtests in old copies of standardized achievement tests make effective worksheets.

...With any canned comprehension material, demonstrate the first item in a lesson and **explain how you arrive at your answer.** If it's a multiple choice situation, your explanation will include why you rejected each incorrect response.

...Ask all types of questions. Teachers are most familiar with **fact-finding questions** where the answer was given in the reading material. Don't forget **sequencing/translation questions** such as "Tell me the story in your own words." Include **vocabulary** questions like "What does 'antelope' mean?" or "Find a word that means the same as 'happy'." Other types of questions to be asked are: **summary questions** ("Name this story,"); **inferential questions** ("You read about the birds returning and the leaves budding--what season is it?"); and **judgmental questions** ("Do you think this really happened--why? why not?").

...If the student breaks down with reading comprehension back up to listening comprehension with any type of question.


dyslexia ?
emotional block ?
congenital learning disability ?
specific dyslexia ?
word blindness ?
lazy ?
developmental dyslexia ?
inappropriate instruction ?
strephosymbasia ?
dull ?
alexia ?
maturational lag ?
specific language disability ?
MEANWHILE, BACK AT THE RANCH ....

DEVELOPMENTAL DYSLEXIA: SCREENING AND STRATEGIES BASED ON READING AND SPELLING PATTERNS*

A diagnostic screening procedure for developmental dyslexia is described in this paper, revealing three distinctive, atypical patterns of reading and spelling among dyslexic children. One or another of the three delineated reading-spelling patterns is found consistently, in my experience, in all severely retarded readers who fulfill prevailing diagnostic criteria for developmental dyslexia. None of the patterns is found among normal readers. In addition, an invariable correlation has been found between the reading and spelling performance of a dyslexic child, so that how he reads and how he spells are mutually predictive.

The three dyslexic reading-spelling patterns appear to be specific, therefore, and diagnostic in themselves, of developmental dyslexia. As such, they provide a basis for proposing both a classification of dyslexic children into three subtypes or groups and a new direct diagnostic approach to developmental dyslexia.

The three reading-spelling patterns reflect the dyslexic child's functional assets as well as his deficits in the visual and auditory processes prerequisite to reading, and thus have prognostic and therapeutic implications. These implications differ for each of the three subtypes.

Group I

The reading-spelling pattern of children in Group I reflects deficit function in the auditory channel; that is, primary deficit in symbol-sound integration and in the ability to develop phonetic skills. Children in this group utilize intact visual functioning reading globally and responding to whole words that are not yet in their sight vocabulary. Their numerous misspellings are typically nonphonetic, and therefore usually unintelligible. Their most striking errors are "semantic-substitution errors" - the substitution in reading and sometimes in spelling of a word that is closely related conceptually, but not phonetically, to the given word. For example, they might substitute "funny" for "laugh", "human" for "person", "answer" for "ask", "quack" for "duck", "airplane" for "train", "Los Angeles" for "city".

Group II

Group II children manifest deficit function in the visual channel; that is, their reading-spelling pattern reflects primary deficit in the ability to perceive whole words as gestalts. They utilize intact auditory functioning reading phonetically, sounding out most words, familiar and unfamiliar, as if they were being encountered for the first time. Their misspellings are typically phonetic and therefore intelligible, unlike those of Group I. Omitted-letter errors are frequent. Examples are: "sed" for "said", "letl" for "little", "lisn" for "listen", "sos" for "sauce", "rit" for "right", "bisnis" for "business", "onkl" or "uncal" for "uncle".

Group III

The reading-spelling pattern of children in Group III reflects deficit function in both the auditory and visual channels; that is, they have primary deficit in both the ability to develop phonetic skills and the ability to perceive whole words as gestalts. These children tend to remain nonreaders even at the high-school level unless they have had intensive remedial-reading therapy. Their misspellings, like those of Group I, are nonphonetic, but their misspellings appear even more bizarre: sometimes an inappropriate initial letter; usually an unintelligible jumble.

The classic dyslexic errors, which are generally considered to be diagnostic of developmental dyslexia - notably, the static and kinetic reversals and letter-order errors - are found to occur in all three of the subtypes.

Utilizing the dyslexic reading-spelling patterns as diagnostic criteria offers fundamental practical advantages, among them the following:

Diagnostic. The patterns permit direct diagnosis of developmental dyslexia even when it coexists with or is marked by mental retardation, superior IQ, or emotional disorder, or the hyperkinetic syndrome. They also permit diagnosis when developmental dyslexia exists in isolation, without demonstrable neurological concomitants and in the absence of a familial history of reading disability.

Prognostic. Each of the patterns has been found to have prognostic implications, the prognosis for Groups I and II, in which only one sensory channel is

*From a paper by Elena Boder. Strategies by Judith H. Dettre

deficient, being generally more favorable than the prognosis for Group III, in which both the auditory and visual channels are affected.

Therapeutic. Each of the patterns provides guidelines to the appropriate individual remedial techniques to be utilized initially. The three dyslexic patterns permit the grouping of dyslexic children into relatively homogeneous groups in an attempt to meet individual remedial needs on a group basis.

Strategies

Group I

Group I students will generally benefit from captitalizing on their visual strengths to overcome their auditory weaknesses. In reading, for example, one might use a linguistic series which presents word families in sequence, but uses a look-say **and** spell-it-out approach to word analysis. Word parts such as prefixes, suffixes and common roots should be memorized as "sight word parts". As the youngster develops through this approach, the necessary auditory associations generally "come together" for him. If, on the other hand, the youngster is faced with a "sounds first" (phonics) approach, he may never progress far enough to make these associations. All youngsters who qualify as Group I dyslexics should be taught the alphabet as a first prerequisite to reading and spelling achievement. Oral spelling should be encouraged since it is the most natural way for this youngster to focus on the number and sequence of letters in a word.

Group II

Group II students are generally better readers than those in Group I since their best initial approach to reading is through phonics - the most prevalent approach used in the schools today. In both reading and spelling, however, their mistakes are generally centered around non-phonetic words. Sight words in reading are generally a problem and mastery standards should be high. ("Recognize word in 2 seconds, 15 times in random presentation.") Mispronounciation/exaggerated pronounciation is a technique that can help. (For example, **lĭs tĕn** and **bŭs ĭ nĕss** are said as the child reads and/or writes them.) In studying spelling words the Group II students might make use of letter tiles to reproduce the words in sequence thereby encouraging them to concentrate on the visual aspects of the word. Spelling requires more attention to visual aspects of the word and is likely to be more of a problem than reading. Alphabetic (oral) spelling will eventually be helpful, **but** it's use should be delayed if an initial phonics approach to reading is being stressed.

When the youngster has mastered the essentials of phonetic word analysis (about 3rd grade level reading) the alphabet letters may be stressed in spelling.

Group III

Group III students **can** learn to read and spell, hopefully through a kinesthitic approach (which involves tracing and/or writing the words to be learned). This assumes that the fine motor performance of handwriting is at least adequate, allowing the student to concentrate on more than just the process of forming letters. If the student's handwriting is overly shaky, erratic and/or labored, it is doubtful that the kinesthetic approach will help. (The practice of "writing the spelling words 10 times" is of questionable value for any student with very poor handwriting skills regardless of classification as a Group I, II or III Dyslexic.) For the Group III student, though, one should make a special effort to improve handwriting since it may become a key to reading and spelling achievement. Reproduction of words with letter tiles may be used as an alternative if handwriting appears unremediable.

The kinesthetic approach is actually a multisensory one as are the majority of spelling programs in use today. Most youngsters are able to pick out the cues they need from this multisensory menu. Unfortunately, many Group III youngsters (and even some Group I or II types) are unable to cope with this bombardment of "see-hear-touch-write." They need to concentrate on **one** sense at a time until they determine the one that is most useful for them. In this case the teacher would concentrate on word analysis emphasizing one sense at a time for a period of several weeks in turn until the most effective method is found:

visual = alphbetic oral spelling, letter tiles, configuration clues, rote visual memorization like sight word practice

auditory = phonics, sound blending, listening practice, say-it-fast, say-it-slow, mis-pronounciation/exaggerated pronounciation

kinesthetic = feel it (letter shapes and sandpaper letters), templates, tracing, writing, typing.

A KINESTHETIC METHOD OF TEACHING WORDS SIGHT WORDS AND/OR SPELLING WORDS

1. Teacher pronounces the word; uses it in a sentence; pronounces it singly again.

2. Student writes the word on the chalkboard. If the word is correct, teacher goes on. If the word is incorrect:

   A. Teacher writes the word with crayon on paper (manuscript or cursive, depending on grade level), saying word, then spelling word.

   B. Student pronounces the word, takes his index finger (with the rest of his fingers closed) and traces each letter, saying them orally. He repeats the tracing with his finger, etc.

   C. Student then takes a different colored crayon, says the word, then traces the letters with the crayon, again saying each letter. This is repeated for as many times as the instructor feels is necessary.

   D. Student goes to chalkboard and writes the word. If incorrect, the above process is repeated. If correct, the student goes on to the next word.

A list of difficult words should be kept, and reviewed from time to time.

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FACTORS INFLUENCING EASE/DIFFICULTY OF HANDWRITING TASKS

Factor	Easy	Medium	Hard
1. Plane of writing surface	**Vertical** (chalkboard, paper taped to wall)	**45° angle** (clipboard on knees, "old fashioned" desk)	**Horizontal** (flat desk, table)
2. Writing surface texture	**Readily imprints** (sand or salt tray)	**Some imprinting** (soft clay)-(soft paper)-	**No imprint** (slick paper)
	Resistence to implement (fine sandpaper)	**Some resistence** (construction paper)	**No resistence** (slick paper)
3. Writing surface guides	**Track for implement** (templates)-(stencils)-	**Visual track not a factor** (unlined surface) or **Strong visual track-letter only** (tracing paper over single letter on unlined paper)	**Visual track** (lined paper)
4. Writing implement	**None-little pressure** (tracing with finger)	**Implement-little pressure** (magic marker)-(soft chalk)-	**Implement-maximum pressure** (pencil/pen)
5. Model	**Present** (copying)	**Fading/Remembered** (practice from model-write from memory)	**Absent** (No model-write from dictation)
6. Plane & distance of model	**Same as writing surface** (tracing)	**Right above on same surface** (writing "copybook") **Same plane different surface** (book to paper)	**Different plane-diff. surface** (board to paper)
	Nearpoint model (model 18" from eyes)		**Farpoint model** (model across the room)
7. Style of model	**Same as assignment** (manuscript to manuscript, etc.)		**Different from assignment** (print to cursive)
8. Model-demonstration	**Directly on writing surface** (teacher demo on student's paper)	**On different surface and/or plane** (teacher demo on board-student writes on paper)	**No demonstration**
9. Writing task-movement repetition	**One movement required** oooo cccccc	**Limited movements required** bad cad	**Unlimited movements required** matter elephant

Developed by Judith H. Dettre.

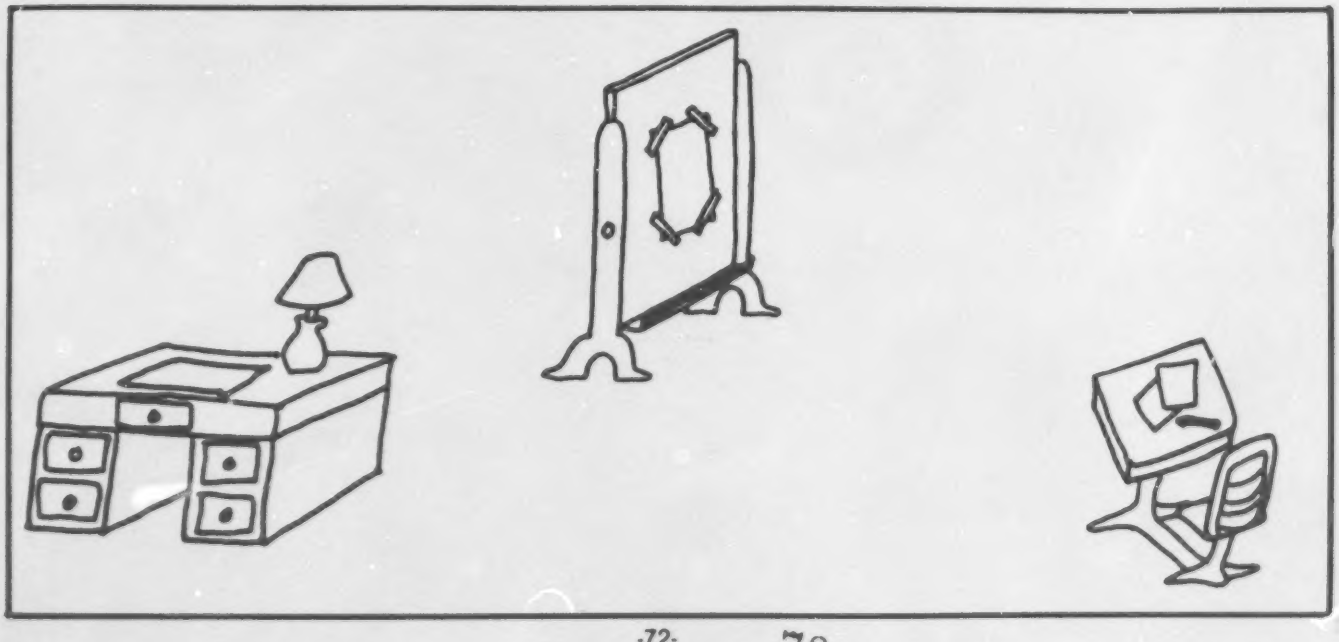
Handwriting Difficulty (p.2)

FACTOR	EASY		HARD
10. Writing task-quantity & use	**Single letters** (strictly for handwriting practice)	**Words** (initial written expression)	**Sentences** (for exposition purposes)
*11. Writing task-rate	**Slow** - labored	or	**Fast** - legible
	Fast - illegible		**Slower** - legible

In addition to the above factors, two others are often mentioned. The first is size of writing implement (crayon or fat pencil to regular sized pencil), while the second is style of writing (manuscript to cursive.) Since there is little agreement concerning these issues (some children seem to do better with thin pencils and cursive right from the start), they were not included.

*The 11th factor, rate, is purposefully contradictory. Although the common pattern is "slow is easy", many hyperactive children find it almost impossible to slow down enough to write legibly. For them "slow is hard!"

HANDWRITING IS STRICTLY A TOOL FOR WRITTEN EXPRESSION. Only when the student can write without undue thought to the mechanics involved is he free to be creative/expressive. Stated another way, skill practice including writing from models and dictation is an essential step toward freedom of written expression.



Math Strategies "Facts" and Place Value

Problem: "He keeps counting on his fingers, etc., and won't learn his facts. Does he have a memory problem?"

Strategy: He may, but more likely he has never been required to learn them *well enough* to use them fluently. Mastery of math facts requires high standards just like mastery of sight words in reading.

The student should be able to write the answer to any given math fact correctly within 5 seconds, 10 times in random presentation.
Allowing more time is just begging the issue since it gives the student the idea that "figuring out" is permissible. If writing the number takes an inordinately large amount of time, an extra second or two on the math task might be allowed, while practice in writing numbers fluently is practiced concurrently. (That is, number writing practice should be given separately while allowing the youngster the extended time on the math task.)

Oral practice is also a means to the same end. High standards in terms of time should be stressed as in sight word practice (3 second response). The usual task for checking criterion performance is the randomly arranged fact work sheet. The student may practice these orally, but for the actual test, the student writes the responses in a limited amount of time. Count the number of facts on the sheet and multiply by 5. Add an extra 5 seconds for a minor mental lapse and you have the amount of time you will give the student to complete the task. When the student has repeated this task correctly 10 times with the same facts in different order, the final criterion has been met.

If the student understands the fluency criteria, but still has difficulty memorizing the correct responses, different methods of studying should be tried. The situation is similar to the study methods assessment presented for reading and spelling. Applied to the task of learning math facts it looks like this:

1. Some students learn better if they concentrate on the visual aspects of the task. (Studying facts with answers, then facts without answers attempting to remember the image of the missing answer. Standard flash cards are usually set up for this type of practice.)

2. Some students learn better if they concentrate on the auditory aspects of the task. (These students should be encouraged to say the complete fact while studying--and whisper softly while taking the written test. Straight oral practice **first** is often indicated, then the task is changed to the written sheets.)

3. Some students learn better if they concentrate on the kinesthetic aspects of the task. (Studying might include tracing completed facts and writing correctly; however, special care should be taken to monitor incorrect response.)

In addition, many students benefit from oral counting by 3's, 7's, 9's, etc. especially when this is related to a number line. However, after a time the number line would be removed and the student relies on: 1) the remembered image of the number line, 2) rote auditory memory of the sequence or 3) both. When students master the forward counting, counting backward from different numbers can be introduced. This can be in relation to the times tables ("Count backward from 63 by 7's") or not ("Count backward from 97 by 3's"). As a final experience, the student counts by composite numbers as in "1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 27..."

Problem: "How can I teach the concept behind place value? I've used every visual and manipulative device I have and still nothing!"

Strategy: Unfortunately, some students seem to learn the concepts **after** they've mastered the calculation. Continued use of manipulatives merely confuses the issue until the "old math process" is mastered. Old-fashioned arithmetic exercises become a means to an end--the understanding of the new math concepts.

There is one notable exception to the "defer manipulatives" suggestion, however, dealing with the use of money. Money is one of the "life problems" features that is always with us, so real and continued practice is assured. If denominations are limited to the penny, dime and dollar, the use of money becomes a powerful tool to the understanding of place value.

"HEY! ME TOO!"

Curricular Adaptations for the Mildly Handicapped Secondary Students

In Literature:

1. Try listening to taped or recorded stories along with following the printed text.
2. Use a small group of class members to be the readers to the rest of the class, something like a Reader's Theatre or a play read-through, only in class.
3. Pair readers for reading assignments which are over the heads of some of the students- put a good or average reader with a poor reader.
4. Have the teacher or an excellent reader read orally to the class and let other students follow along in the text.
5. Use student or simplified versions, films or filmstrips with clasics and novels for the poor readers to understand the material being covered in class.
6. For students with severe reading problems obtain the Talking Books for the Blind now available for individuals with severe visual perceptual problems.
7. If parents are cooperative, try to enlist a family member to read to their youngsters.
8. Utilize tutors outside of class-volunteers from school, community, senior citizens, etc.
9. Review lessons frequently to build the sequence for students having some difficulty following the story line.

Math

Many of the math problems with these youngsters involve fear or awe of too much stimuli, or lack of organization in how to attack the material. To help:

1. Assign fewer problems. If there is pressure from other students, assign all students varying amounts of work (alternate problems, 1-15, another group 15-30, etc., random numbered problems, etc.)
2. Have students fold paper into lines, quarters, or half and just work what they see until that is complete to cut down on visual stimuli.
3. Use a tutor who prepares a sheet with wider spacing and fewer problems per page.
4. Let the student work the problem out, write it down, then use calculator to check work. If he didn't get it right, he can then ask for help on a problem. Emphasis is placed on process because students know the calculator will give the correct answer. It's also motivating to use the calculator.
5. Students often can tell us what kind of day she/he is having if we'll just ask. Try when giving an assignment or sheet of problems, have the student write at the top before she/he starts, how many can be done correctly. Then let the student work them, correct them and see if she/he met his goal. Proceed to a greater number gradually.
6. In story problems, often related to confusion in reading, have the student read the problem and underline key words and phrases. Then proceed to determine what type of problem it is, addition, subtraction, etc., or have someone read it to the person having reading problems.
7. If problems are mixed up, addition, subtraction, etc. on one page, point this out by underlining, circling, or using yellow marker, etc. on the addition, subtraction, etc. sign. Then fade clue gradually.
8. Set up a system (checklist, if you will) of how to attack a math problem. e.g., post a chart with suggested steps for students to refer to.

Reading/Study Skills:

1. Always introduce new words in assignments, go over their dictionary meanings and meanings of how the word is related to what they will be reading.
2. Review words periodically. Don't expect to show the word to students once and have them remember it.
3. Determine the reading level of your text, using the Fry or another readability index. If material is too high for some of your students, assign portions of assignments, reading pairs, or something which is within their reading level. Don't expect a student to read and comprehend something above his reading level.
4. Guide student's reading with meaningful questions.
5. Teach the SQ3R method as a study technique
   - S- scan or survey the section to be read
   - Q- turn all bold face type into questions, ask that question then
   - R- read that passage, continue this until the end of the section or chapter answering the question at the end of that section
   - R- review what you've read, use the questions at the end of the passage and review the chapter by

R- reciting them out loud and reciting the answers.

(If there are no questions at the end, make up your own from the bold type and recite the answer to those for your review.)

6. Take a sheet of paper and before reading or studying, write down everything in your mind -even dirty words and place that at the end of what you need to study, then study. It clears your mind for studying/reading.
7. Use problem readers as tutors to younger children. Often problems in reading lie in lack of reading skills by that older student.
8. Provide an outline for students in reading assignments which covers key points and guides their reading.

Reports:

1. Let some students do oral reports - this can be done student-to-teacher.
2. One person reports to a small group with each student rating the report on a checklist. Review the checklist fully and use a couple of them in a demonstration setting.
3. Let student work in groups to discuss topics. They select a reporter to feed back to the large group.
4. Let a student tape an oral report. You may want to require a brief written outline.
5. Submit written reports but allowing for variations such as illustrations with the report or a series of illustrations with captions which can be substituted for written report.
6. Write or prepare a report for younger children and allow students to present their reports to classes of younger children. This keeps the reading level low and removes the threat of reporting to one's peers.

Science:

1. In lab work, group students who have varying abilities.
2. Make science a living exploration rather than emphasizing textbook material. Take science activities out of the classroom.
3. Base grades on actual science work rather than just technical examinations.
4. See suggestions under other categories also.

Social Sciences:

See literature for some suggestions.

1. Obtain a variety of books covering the various topics that are being studied and individualize readers' assignments to something within each student's reading ability.
2. Extend the study of social science topics into a project. For example, if you are studying geography instead of using the wall map, build a topographical relief map in the classroom. The more talented students can read and help translate information and directions to students having difficulty.
3. Utilize films and filmstrips about areas in an unusual way, e.g., instead of showing a filmstrip and cassette as traditionally used, select certain frames of the tape for common study and discuss them. For example, when using a filmstrip on climate, look at the roofs of the different type of buildings, or plant life, or soil and try to draw conculsions about the climate and the type of clothes worn by people living there.
4. Extend the social sciences into the community. Relate history to older members of the community who can relate local history. In studying World Wars, Korean or Vietnamese Wars, bring in community members who can relate the impact of the war both at home and abroad.
5. Make social sciences as realistic as possible If you're studying the Old West, obtain a collection of antiques or artifacts to bring in, art work, home crafts, etc. Use these as a point of discussion rather than using written material. Try to emphasize how people lived, their ways of having fun, the type of work they did, through discussion, outside speakers interviews with grandparents and other elderly people.

Tests/Evaluations

1. Avoid T-F tests. They emphasize reading and trick reading at that.
2. If possible, change the emphasis in your teaching on learning rather than testing. If a student can do work in class but freezes on tests, find more informal ways to get an accurate assessment of the student's knowledge.
3. Test what's important and teach what is important. Trivia is not the real meaning of education and especially not for students with learning problems.
4. Try not to test too much material at one time. This tends to "overload the circuits". So, shorter, more frequent tests are better than infrequent lengthy exams.
5. Teach and test what your objectives say you'll teach and test. A straight forward, no curves

approach will be much easier for the students with learning problems to understand.

6. Curb any appetite you might have for pop quizes as punishment to make students study. Rather, if you want quizes, use them with warning and as a means of diagnosing how your students are learning. Quizes also indicate how you are getting the material across to the students.
7. If you've presented something new or something difficult, get student's reaction of whether they are understood by asking a few simple questions. Have students respond to a few basic questions like, "Do you understand the material presented?" or "Did you enjoy the new material covered in class?"
8. Use a pictorial test for a change, industrial arts, science, and home ec lend themselves to this particularly.
9. Have the student interview with you if you don't know what she/he knows. Grading and evaluation should be open, not a surprise. Try to test according to individual's ability and on relevant information.
10. Give students' tests orally if they need that type of assistance. This can be done with a resource room teacher, a volunteer or any other available adult. You can use student assistants, but select carefully and not a peer. Consider the delicate position of the student assistant in the testing matter.
11. Tape a test and have a student use a headset in the classroom or just the tape recorder in another room. Responses can either be written or give orally with enough time allowed on the tape.

Remember, if you've been expecting a student to read assignments above his/her reading level with no assistance, a test even given using some of these techniques will probably not yield anything until accommodations are made throughout total instructional program.

GENERAL

1. When working on outlining instead of two or three pages or a chapter, have the student outline only the two or three paragraphs which are most difficult for him.
2. Spelling techniques differ widely from writing the word misspelled lots of times to writing it spelled correctly lots of times. In spelling, generally the student is lacking in good memory skills. The extra practice is necessary, but shorten the list of words. Then have students really concentrate on that shorter list. Let them practice both oral and written spelling to see which way they can learn it.
3. Correct grammar is a real toughy if the students are accustomed to learning poor grammar. A couple of things which are a caution: don't try to work on too many changes at one time. Maybe seen-saw, gone-went, are big problems. Work on just that much for a week. Don't keep it a secret that you're working on it. Let other students, teachers, and parents know. Work on it with the whole class. Not just one student. I have seen this work, that the teacher puts a token (or a penny) in a box each time a student uses the word correctly, and the student pays a penny when he or she uses the word incorrectly.
4. Use grammar in games for additional practice. Students can be given ideas on how to write games.
5. Use spelling and grammar rules. When easily understood and taken gradually, it allows for lots of practice on each rule. Skimming over rules offers more confusion than foundation.
6. Try making contracts with students who are having problems for the work to be done for your class. A contract implies input from both parties. A fair contract doesn't mean that the teacher demands something, and the student delivers for some type of reward. (Be willing to hear the student's side of the issue also.)
7. Don't assume that students have all the basic word attack skills. Review of skills can be done with the entire group or in small groups with peer or volunteer tutors.

SECTION E

BEHAVIOR MANAGEMENT STRATEGIES

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MODIFYING DISORDERLY BEHAVIOR IN THE CLASSROOM

Introduction

Three Significant Questions

If a positive approach to classroom discipline is to be realized, we must ask the following questions regarding the disorderly student when we plan our strategies for modifying his behavior.

1. Does he know what is expected of him-that is, does he clearly understand what the rules are? Directions can appear crystal clear to the teacher but the information they provide students may well be incomplete, inaccurate, or conflicting. If there is some confusion about the ground rules, then it is necessary to make them as explicit as possible. Listing the rules on the board, having the student explain in his own words what the rules mean, minimizing distractions while giving directions, and keeping rules short are all ways in which the student can be helped to understand the rules. The teacher should also be careful to relate the student's behavior to the rule so that he knows exactly what he is being rewarded or punished for (e.g., "Now, you're **paying attention**").

2. If the student knows the rules but still misbehaves, then you should consider the second question: Does he have the skills and abilities to do what I asked him to accomplish? Much misbehavior probably occurs as a result of demands that exceed the student's current level of readiness. When behavior problems stem from skill deficits and are secondary to the learning problem, it is necessary to teach the academic and social skills needed to assume the role of a student. The four techniques discussed in the article should help teachers to overcome deficits in the skill area. Providing greater freedom regarding choice in the curriculum also deserves serious consideration in such cases. One high school, for instance, listed more than fifty different English and social studies courses from which the students could choose. In short, one can change the student and/or change his environment.

3. When the student knows what the rules are and when he has the competencies to perform in an acceptable way, and yet continues to misbehave, then we must ask a third question: Is he motivated to do what is expected of him? On many occasions the disruptive student finds his deviant ways more satisfying than conventional ways. In such cases, we need to increase the reward value of the school setting so that students move toward it instead of away from it or by striking out at it. Again, the techniques to be presented should prove relevant to the solution of motivational problems.

Four Steps in Behavior Modification

1) Target Selection. The first step involves the selection of specific target behaviors to change. In many cases, there are several target behaviors that the teacher might like to change. In these instances, it is necessary to establish priorities by deciding which behaviors are most important to the child's academic and social functioning.

Targets must be specific, observable, countable, and measurable. By selecting targets with these characteristics, we can tell whether the strategies being used are having the intended effect.

Be sure not to bite off too much. Altogether too frequently we choose goals that are too broad and ambitious. Rather than attempting to correct a global personality defect, we recommend an analytic approach which takes small steps at a time. It will accomplish more in the long run. It is more productive to try to reduce refusals to complete assigned tasks in biology class than it is to try to correct a rebellious attitude toward authority.

Finally, identify behaviors to be increased as well as those to be decreased. When possible, choose behaviors that are incompatible (for example, paying attention and unnecessary noisemaking).

2) Examining the Antecedents and Consequences. It is frequently helpful to see under what conditions the target behaviors are most apt to occur. For instance, once the teacher notes that Jim completes structured assignments accurately but whines and dawdles when given unstructured assignments, he is in a position to modify Jim's behavior by providing more concrete and specific directions for the completion of assignments. *Gradually,* Jim can be helped to map out the steps necessary for completion of unstructured tasks.

To illustrate the value in identifying the consequences of a behavior, consider the case of Sam, the class clown. When Sam's teacher stopped to remember what happened after Sam acted up, it became apparent that the clowning was being kept alive by peer group laughter and teacher scolding. Armed with this knowledge, the teacher was able to

decrease the frequency of clowning by getting the peer group and himself to ignore such unacceptable behavior. Remember, looking to see what happens *before* and *after* behavior can be invaluable in decreasing undesired behavior and increasing desired behavior.

3) Choosing Strategies. Now it is time to select the techniques you will use to encourage acceptable performance and to discourage unacceptable performance. For the learning and maintaining of appropriate behaviors, positive reinforcement and modeling techniques are indicated. We will refer to these two techniques as *behavior formation* techniques. With regard to discouraging behavior extinction and punishment techniques are commonly used. These are referred to as *behavior elimination* techniques.

4) Recording Results. It is essential that both teacher and student have feed-back on what is happening to the target behavior. The data let both of them know whether the procedures are taking effect. Only the data on the behavior can tell whether the program was effective.

Behavior Formation Techniques

Positive Reinforcement

If a behavior has the effect we want, then we are inclined to repeat it. Behavior, in other words, is determined in large measure by its consequences. For instance, if a student can attract attention by blurting out answers in class, he will probably not raise his hand and wait his turn. All behaviors must have a payoff of some kind or we discontinue them. Among the most common payoffs for misbehavior are attracting attention, gaining power, getting revenge, and being left alone.

The giving of rewards constitutes one of the most valuable tools teachers have at their disposal. Teachers have long recognized the importance of rewards and often use them to change behavior. Thus, the teacher who says, "I see that Johnny is ready to begin his math now that recess is over" is rewarding Johnny by giving him recognition for his attentiveness and studiousness.

One of the merits of this approach stems from its applicability to all students. It is not for just the antisocial student or for the educationally disadvantaged or for the brain-injured or for the emotionally disturbed or for the normal child. Every student, regardless of the label we attach to him, needs ample rewards if he is to behave and achieve in school. To be effective, the teacher must answer questions relating to the frequency of reward, the timing of reward and type of reward to be used.

HOW OFTEN SHOULD I BE REWARDING? With respect to the frequency of rewards, a distinction must be made between the acquisition (i.e., learning or building) of a behavior and its maintenance. When the teacher wants a student to behave differently, he should ideally reward the student **every time** the given behavior occurs. (In actual practice, it is not always possible to reward a behavior every time it occurs. The student's action should be rewarded as often as possible however. Remember, the greater the frequency and amount of the reward, the faster the learning.) Thus, for example, the habitually hostile child who makes a friendly or cooperative or nonaggressive response toward a classmate should be rewarded **every time** he does so. Rewarding him once or twice is not enough. We must do it again and again on a *regular* basis until his cooperative behavior toward others has been securely acquired. Then, it is no longer necessary to give frequent rewards. In fact, it would then be best that the teacher reinforce such behavior every now and then (intermittent reinforcement) rather than 100% of the time, since intermittent reinforcement renders the behavior less subject to forgetting. Once the new behavior has been acquired, the problem centers around the maintenance of behavior — i.e., with how long the student will remember to behave this way once you are occupied with other students or activities and cannot reward him regularly. After all, to get along in the classroom, the student has to behave appropriately without the teacher's paying attention to him all the time. Having established the desirable behavior, we should reward the student every now and then for appropriate behavior.

WHEN SHOULD I BE REWARDING? Timing is especially critical in our giving of rewards. Sometimes teachers give rewards before the child has complied with demands. This is a mistake, for there is little incentive to put forth effort once the payoff has been received. This is why we customarily pay people *after* they do the job.

How much time should elapse between performance of the desired behavior and giving of the reward? Initially, the delay factor may have to be quite short when dealing with acting-out youngsters because they typically have difficulty postponing gratification. Step-by-step however, the interval can be lengthened as the child acquires more adequate behavioral controls. Hence, the teacher may initially have to reward the conduct-disordered child immediately after his good behavior at recess time or

in the laboratory. Eventually, if all proceeds well, the student will develop greater ability to postpone gratification. One teacher was able to lengthen the time interval by asking the student if he would mind waiting until tomorrow to get his lifesaver. Another teacher, who had been using art activities for some time as a potent reward, asked the student if it would be all right if they skipped art this afternoon since other class activities had in fact run behind schedule.

The delay interval may also have to be short with youngsters whose self-esteem and self-confidence are severely impaired. A seriously disabled reader may, for example, need a reward such as the teacher's praise or encouragement immediately after he has sounded out a single word. Later, as he gains in reading skills and personal confidence, he may not need to be rewarded until he has completed a whole page or story. In fact, once the student's frustration tolerance increases, the reward need not even be given during the school day or in the school setting. The accumulations of so many points may be used to earn him a fishing trip with his dad on the weekend or entitle him to the school picnic coming up next month or the watch his favorite TV program that night or to go horseback riding.

WHAT TYPE OF REWARD SHOULD I USE? The third question teachers should ask has to do with the wide variety of rewards that teachers can use. For purposes of exposition, the rewards listed in the Table are arbitrarily divided into four categories--tangible rewards, people rewards, activity rewards, and intrinsic rewards. Though listed separately, the effective classroom teacher will use different kinds of rewards rather than overworking a single reward. Even mature adults require the kinds of rewards presented.

One problem that crops up is the student's failure to display rewardable behavior. In this case, the teacher can do one of two things. He can reward small improvements (the method of successive approximations) or use modeling procedures.

Modeling

Positive reward can sometimes be an exceedingly slow method for the learning of *new* complex behaviors. Effective as positive rewards are for strengthening old behaviors, they often demand arduous and ingenious changes in classroom procedures to produce appropriate *new* behaviors which can then be rewarded. As we noted earlier, the new behavior or some approximation thereof must first occur before appropriate rewards can be applied. In addition to being time-consuming, the rewarding of trial-and-error learning can prove hazardous in many natural settings. For example, if we waited for an individual learning to swim to exhibit spontaneously a proper stroke or an approximation thereof and then rewarded him, few of us would live long enough to become adept swimmers. Modeling procedures (which refer to such processes as imitation, observational learning, role playing vicarious experience, and emotional contagion) can circumvent these difficulties, thereby offering a shortcut to the learning of complex tasks. The importance of learning by watching cannot be over-stressed.

Under most natural learning conditions, social behaviors are typically learned through imitation in large segments or in toto rather than acquired in a piecemeal, trial-and-error manner. The sheer simplicity of learning through imitation justifies its use in preference to or in combination with positive reward. There is no question but that modeling procedures are an economical means of transmitting new appropriate behaviors, especially when telling the student what to do (verbal modeling) in combination with demonstrations. In actual classroom situations these two ways of encouraging behavior-positive reward and modeling — are typically combined, with the student obtaining a reward when he imitates an act performed by the model. Once acquired, the behavior can often be maintained without external support, since human beings learn to reward themselves for behaving appropriately. The combination of modeling and reward procedures is probably the most effective method of transmitting, eliciting, and maintaining social behavior.

Teachers who are aware of the importance of observational learning realize that we often teach by example. Since the learning and regulation of human behavior can be strongly influenced through examples of socially acceptable behavior, teachers are often able to influence student behavior through the use of modeling. Though much remains to be learned about modeling procedures, these techniques are well suited for use by educators with withdrawn students, antisocial youngsters, and those who simply are lacking in adequate social and scholastic skills.

Despite having distinct practical value, these techniques have been neglected in helping students to behave more constructively. Training institutions have long recognized the importance of modeling procedures in the preparation of future teachers, and therefore have attempted to provide adequate models in the form of critic teachers; however, less attention has been devoted by training institutions

TABLE

EXAMPLES OF DIFFERENT TYPES OF REWARDS

Tangible Rewards	People Rewards	Activity Rewards	Intrinsic Rewards
Candy	Praise	Going on field trip	Overcoming a problem or handicap
Popcorn	A smile	Choosing your own seat	Success experiences
Whistles	A wink	Reading favorite story	A sense of pride in accomplishment
Stars	Expressing interest	Putting head down and resting	Allowing student to plot his progress
Trinkets	Physical nearness	Doing crossword puzzle	Using content that is humorous, dramatic, or surprising
Points	Approval	Drawing	Letting the student catch teacher mistakes.
Money	Picking teacher as a playmate	Cleaning erasers	Providing for repetition by converting drills into games
Comics	Showing respect	Tutoring	Allowing student to explore his curiosity about a topic
Baseball cards	Having parents sign a note of good behavior	Having a "rap" session	Developing a sense of mastery
Athletic passes	Membership in "Who's Who Club"	Getting extra recess	Allowing student to vary methods by which he learns-e.g., use of slides, writing creative short stories

to using the modeling procedures as a means of influencing the behavior of the pupils with whom the teachers will have to work.

Behavior Elimination Techniques

Extinction

Just as there is a substantial body of research demonstrating that the presentation of rewards can facilitate the learning and maintenance of given behaviors, there is a growing body of literature demonstrating that extinction--which refers to a process of discouraging certain specific behaviors by not rewarding them--can reduce or eliminate troublesome behaviors. If a behavior is learned through the giving of rewards, then it can be unlearned by taking the rewards away. If a given behavior no longer has its intended effect, its frequency tends to diminish.

If the troublesome student acts out and nothing happens, he soon gets the message and abandons the particular maladaptive way. In short, simply removing the rewarding consequences of an act constitutes an effective way of discouraging it. This technique has been found effective with a wide variety of behavior.

Despite the simplicity and potency of this principle, teachers often fail to use it to its best advantage. A fuller understanding of the cautions and guidelines regarding the use of this technique should enable us to apply it to better advantage.

1. Combine extinction and positive reinforcement. Extinction removes the payoff for unacceptable behaviors, whereas positive reinforcement increases the probability that an acceptable behavior will replace the extinguished behavior.
2. If old habits recur, remain calm and lay the unwanted behavior to rest once again by undertaking another series of extinction trials. Fortunately, the unwanted behavior can be more readily extinguished on the second series of extinction trials.
3. Ignoring behavior leads to extinction when the payoff is attention. Being aware of the value of ignoring is one matter, and practicing to ignore is quite another. **Ignoring requires rigorous self-control.**
4. Just as peer group reinforcement can serve as a powerful strengthener of behavior, group extinction procedures can also serve as powerful weakeners of behavior. Enlisting peer group support can be very beneficial. For example, at a class meeting, the group might make a rule to the effect that all clowning behavior will be ignored by them.
5. When reinforcement for maladaptive behavior comes from the act itself (for example, fighting and seeing a look of pain on the victim's face), other tactics such as punishment are necessary.
6. When the dangers of physical injury and emotional contagion are distinct possibilities, some form of punishment (isolation or physical restraint) is the method of choice.
7. In applying extinction procedures, expect misbehavior to remain at a high level or actually increase during the initial stages. Don't let this discourage you. Be consistent and the frequency of behavior will taper off.
8. New misbehaviors sometimes emerge (for example, verbal impersonations of the teacher after pantomiming has been extinguished). The problems associated with extinguishing a long succession of inappropriate behaviors can be eliminated by combining extinction with positive reinforcement and/or modeling.

Because teachers have not always taken the above guidelines into account, they have sometimes become discouraged in their use of this technique. The writers have seen many teachers disheartened in trying to implement the school counselor's advice not to reward maladaptive behavior. What commonly happens, unless the above precautions are noted, is that the teachers' efforts to extinguish unacceptable student behavior undergo extinction. Extinction procedures can be a valuable aid to the teacher when used wisely, however.

Punishment

Objections to the Use of Punishment--Punishment is as old as human history. It is an inevitable part of everyone's learning experiences. Indications are that punishment is here to stay. The use of negative consequences has been disavowed, however, on both moral and scientific grounds.

From a moral viewpoint, the word punishment connotes inhumane treatment, negative attitudes, and hostile acts. Even if successful, punishment forces the person to do something against his will. Advocating the use of punishment is, in the minds of many people, tantamount to asking them to forgo years of progress in human reform. In actuality, however, it is probably much more humane to subject people to a small number of brief painful experiences in exchange for the interminable pain of a lifelong maladjustment.

Traditionally, certain specific objections have been raised on scientific grounds against the use of punishment as a behavior modification technique. Another five cautions to be discussed suggest that if punishment is to be used as a means of changing behavior, it should be judiciously applied.

1. *Short-term Effects*--First, punishment does not eliminate the maladaptive response. Instead, it merely slows down the rate at which the troublesome behaviors are exhibited. How many times have you scolded a student, kept him in from recess, retained him after school, put him out in the hall, threatened to lower his grade, or sent him to the principal's office, only to find that he engages in the very same misbehavior after a short while?

2. *Lack of Direction*--Punishment simply serves notice to stop inappropriate behaviors. It does not indicate to the student what behaviors are appropriate in the situation. How often do we catch ourselves saying things like: "George, stop that and do what you're supposed to be doing." "Sally, quit that fooling around and do it right." Our verbal reprimands make it painfully clear to the student that we want him to stop misbehaving but rarely make explicit what we want him to do. Consequently, the student may frequently not know exactly how he is to remedy the situation.

3. *Escape and Avoidance Behaviors*--Foremost among the unfavorable side effects of punishment is the development of avoidance behaviors. It is common knowledge that we have a strong tendency to avoid contact with individuals and situations that we find unpleasant. In many instances, these resulting escape and avoidance behaviors (truancy, lying, cheating, etc.) may be more unwholesome than the behavior that the original punishment was designed to eliminate.

4. *Constricted Behavior*--There are two other consequences that can stem from the use of punishment: namely, the inhibition of socially desirable behaviors and the development of personal rigidity. The effects of punishment are not always confined to the behaviors that we want eliminated. Harsh punishments, especially those applied over lengthy periods of time, can also lead to the inhibition of socially desirable behaviors and to a loss of spontaneity. In other words, the punished student may come to suppress socially acceptable patterns of behavior that are not in need of censure. As a consequence of over-generalization to other aspects of behavior, the student may also become less flexible in his adjustment.

5. *Setting a Bad Example*--On many occasions, the teacher's words or direct teachings say one thing to the student while his actions or indirect teachings say something contradictory. Unwittingly, parents and teachers provide a clear-cut model of the very kind of behavior from which they want their children or students to refrain.

Despite the limitations associated with this technique, many psychologists now contend that certain negative sanctions, if properly applied, can assist in eliminating detrimental patterns of adjustment. As we shall see shortly, the undesirable byproducts are not necessarily inherent in punishment but stem from the faulty fashion in which it is applied. Indeed, considerable human behavior is changed and maintained by natural aversive consequences without any ill effects. To avoid painful consequences, we put on warm clothes to protect against the cold, we walk along the side of the road, we run from falling objects, we try not to fall down, we drive properly so that we do not lose our driver's license, and so forth. We engage in a great deal of behavior simply to avoid pain, and our personalities do not become warped as a result.

The use of punishment as an intervention technique is most likely necessary in that it is impossible to guide children effectively through the use of only positive reinforcement and extinction. A child does not come to regard rudeness as an undesirable form of behavior simply by reinforcing respect for others.

Guidelines Toward a More Effective Use of Punishment--

1. Punishment should be used in a corrective way. It is designed to help the student improve now and in the future. It is not to retaliate for wrong-doing in the past. Punishment prompted by teacher mood has no place in the classroom. Punishment is to be used in a rational, systematic way designed to improve student behavior, not to make the teacher feel better.

2. Ideally, punishment should be inherent in the situation rather than an expression of the power of one person over another. In other words, punishment should express the reality of the social or physical situation. The idea is to let the child experience the unpleasant but natural or logical result of his own actions. Used in this way, we can minimize or avoid the dangers associated with one human being's delivering punishment to another.

3. On those occasions when it is necessary for one human being (for example, teacher, principal, peer group) to punish another human being (for example, student), it should be done in an impersonal, matter-of-fact way. The punishment agent must guard against the tendency to yell or scold, for this indicates

that his attitude is one of revenge and often reinforces unacceptable behavior.

4. Once a good rule has been agreed upon, the youngster who violates it should experience the unpleasant consequences of his misbehavior. Excuses and promises are not accepted. There is to be no escape from the unpleasant consequences of the actions. Acceptance of rationalizations only serves to promote social and personal irresponsibility. Insist on performance.

5. A youngster should be given one warning or signal before punishment is delivered. The warning may eliminate the need for punishment. Even when the warning proves ineffective, it adds an element of fairness to what follows. On those occasions when the warning fails to deter unacceptable behavior, extended discussion or "reasoning" is contraindicated since teacher attention tends to strengthen unacceptable behavior.

6. The nature of the punishment and the manner of presenting it should avoid the arousal of strong emotional responses in the person punished. The use of a behavioral contract in which the student has a choice of consequences (as well as goals) can prove helpful in this regard.

7. The teacher must be consistent in his use of punishment. Ideally, the target behavior should be punished each time it occurs. Once the student has learned the habit of not responding in a particular way, intermittent punishment should be used.

8. When used contingently and immediately, mild punishment can produce enduring positive change in cases where severe punishment alone fails.

9. Avoid extended periods of punishment, especially where low-intensity punishments are used. Letting the youngster experience the maximum intensity of the punishment is more humane and effective than exposing him to a prolonged series of lesser punishments. A firmly presented time-out period is more effective than several "no's" of increasing loudness.

10. One strategy that is designed to promote a durable elimination involves the combined use of punishment and reward. Punishment reminds the student what not to do. The reward of appropriate alternative behavior tells the student what he should do.

11. Timing plays an important role in determining the effectiveness of punishment. Children who are punished early in a given sequence of misbehavior develop greater resistance to temptation than those who are punished only after completion of the misdeed. Punishing a child after he has stolen something leaves the initial phases of interest, intention, and approach relatively unaffected.

12. To guard against behavioral construction we must reward acceptable behaviors that are related or similar in nature to the ones being punished. For instance, hitting others may be punished; but desirable assertiveness may be rewarded. This sort of selective reinforcement greatly assists the student to discriminate what behaviors are acceptable for a given situation.

13. Remove or reduce the *magnitude* and *frequency* of the rewards that are maintaining misbehavior. Punishment works much more effectively and efficiently once the rewards that maintain misbehavior are eliminated or decreased.

14. Be certain that the delivery of punishment is not reinforcing to the child. For example, if removal from the group is a rewarding experience, then it will not be effective as punishment.

15. Punishment should be used in a way that fosters self-direction. The use of behavior contracts is helpful in that it promotes self-direction by having the student assume responsibility for his own behavior. Allowing the student to end the punishment when his behavior improves also facilitates self-direction.

16. It is important that the use of punishments require little of the teacher's time and energy. If delivery of the punishment is punishing to the teacher, he is apt to stop it because he is inconvenienced by the punishment rather than because the misbehavior has improved. For example, keeping the child after school may involve

as much hardship for the teacher as it does for the student.

Summary

Before attempting to modify disruptive behavior, the teacher must ask if the students have a clear understanding of the rules, if they have the abilities to comply with the rules and if the students are motivated to meet expectations.

The four steps in behavior modification entail the selection of a target behavior, analysis of the antecedents and consequences of the behavior in question, selection of strategies to change the behavior and recording of results.

Positive reinforcement is perhaps the most powerful of the behavior modification techniques for encouraging behavior. Attention must be paid to the timing, frequency and nature of rewards.

Modeling procedures can also be extremely helpful in encouraging behavior. Unfortunately, they are not used as often by teachers as they might be. Discussion focused on the three main effects of exposure to modeling as well as the three sets of factors that influence modeling.

Extinction is one technique that can weaken behavior. Several guidelines were presented so that this might be used to the fullest advantage.

Although the use of punishment has been subjected to considerable criticism, it appears that the limitations of this approach are not inherent in the technique itself, but instead stems from its misuse. Because it is a complex technique, however, it should be used as a last resort and the cautions and guidelines noted should be observed.

Eliminating Rowdy Behavior in Study Hall

One beginning teacher used the novel reward of killing flies to maintain quiet in a normally rowdy study hall composed of 36 students (29 boys and 16 of them on the ninth-grade football team!). The use of fly killing was a natural reward, since the room was infested with flies and a solution was needed. The entire football squad armed with books, magazines, and construction paper came up with an answer. After stopping the confusion, the teacher announced that the students who studied and were quiet during the hour would have the last five minutes free to participate in the war on the flies or to remain seated as rooting spectators. This novel reward worked effectively as the students learned to come into the room, sit down, and open their books, waiting and watching the clock until the fly-killing time arrived.

When the fly population dropped off, the students continued the desirable study hall behavior for "a free time" period the last five minutes of each study hall session.

Comment: Who would have ever thought of fly killing as an activity reward to be earned for acceptable behavior? The answer is, of course, an observant teacher with practical ingenuity. Not that behavior modification techniques can be applied to the class as a whole.

Individualizing Rewards

Introduction

In the past many people who have used rewards for developing behavior have tried to use the same reward for all children. As adults we know that what appeals to us might not appeal to others and that what appeals to us at one time might not at another time. We now have good evidence that we should individualize our rewards, allowing the child to tell us what will be rewarding at the time it will be given. What is desired by one child might well be unacceptable to another, and we should be very careful in making this judgement. Many classrooms and training projects that utilize reward systems have a little store with fruit, ice cream, candy, and toys from which the child can select his reward. The teacher may use a "reinforcing event menu," a picture book of rewards, from which a selection can be made. Toy books and mail-order catalogs can also be quite useful.

Token Systems

One way to individualize rewards is through the use of a token system. Tokens are anything that can be redeemed for merchandise of some kind or for the opportunity to engage in certain behavior. Check marks, teacher drawings of smiling faces, silver and gold stars, trading stamps, foreign coins, metal washers, and specially designed "money" have been used as tokens. There are many other token-type rewards that teachers occasionally use, such a little Valentines stamped on the page, written comments ("Very good, Karen!"), and even bits of construction paper. Tokens have several advantages which recommend them for use in educational situations.

1. A token system allows each child to earn the kind of object or activity that is most rewarding to him. He can spend his tokens for small objects, save them for larger ones, or purchase an activity or free period.

2. The token system approximates the monetary system and gives experience in trading tokens for things. Furthermore, the token system may be used to teach certain arithmetic facts and the care of valuable personal property.

3. The delivery of a token does not interfere with certain educational tasks (e.g., oral reading) as would other rewards, such as candy.

4. Tokens can be given and withdrawn. If one wants to set up a situation where a reward is lost for an error, then food (if consumed) and social reinforcers cannot be used.

5. A token system permits the use of powerful reinforcers which cannot be dispensed in the educational situation. e.g., trips to the zoo, use of a record player or typewriter, twenty minutes of watching cartoons. Thus, small bits of behavior can be rewarded in an economical manner and, if the parents so desire, the back-up rewards for the tokens can be given at home.

6. If records are desired, it is probably easier to record the number of rewards given in group situations when tokens are used, since each child's tokens can be counted at the end of the session. Hence, recording does not interfere with ongoing educational situations. Such records are quite important in that they indicate the extent of each child's participation in the program, if the tokens are delivered in an objective manner. Checks should be made to see that the tokens are being given appropriately.

7. The token is not as dependent on deprivation states as are many other rewards. Not all children view candy, ice cream, or soda pop as a reward.

Token systems of one type or another have been used by some teachers for many years. As we learn more about their effectiveness and how to make them fit in with the natural classroom and home environment, they will be adopted by more and more teachers and parents. Teachers and parents can cooperate in a system in which the teacher gives tokens at school and the parents redeem the tokens at home. Many innovations and improvements undoubtedly will be made, and teachers can contribute a great deal to progress in this area.

Premack Principle*

It is not necessary when attempting to modify behavior to depend wholly on traditional candy or trinkets as reinforcers. It is important only that the teacher be able to identify what students *are doing* most frequently in a given environment when left to their own devices. This *high probability behavior* (what they want to do) can be used as a reinforcer for *low probability behavior* (what the teacher wants them to do). Stated another way, the teacher makes free time or free choice activities *contingent* upon producing a specified amount of work. This is the **Premack Principle**, a form of *contingency management.*

*From an abridged article by Marvin F. Daley.

TOKENS · EARNED

EQUAL

REWARDS

Consider the following example. You have observed children in a preschool nursery. The children run around the room, scream, push a chair across the floor, and play games. All these high probability behaviors occur most of the time. As one would expect, the instruction, "come and sit down," would go unnoticed. Applying the Premack Principle, the teacher allowed the children to engage in their usual behaviors contingent or dependent upon their doing a very small amount of what she instructed them to do (low probability behavior). A typical early contingency required the children briefly to sit quietly in chairs and look at the blackboard. The behavior was followed quickly by the command, "Everybody run and scream now." Immediate control over the situation was obtained. The time spent sitting in chairs was progressively increased and training in school skills was begun. The teacher was able to teach the entire first grade repertoire to these students in about one month of training.

Reinforcement Menu

Still another twist for gaining better control over the contingency management has been to develop a kind of "menu" of activities that represent high probability response. The menu is put in a book form with systematic line drawings or stick figure sketches of the activities. The subject is presented with the menu before executing the task to be learned and is allowed to select from it an event which for him at that moment is a high probability event. Upon completion of the task, he is allowed to go to the reinforcement area and his selection is immediately made available. Certain reinforcing events could be "daily specials" to be made available on a restricted basis. With contingency management and the Premack Principle, the teacher is in a position to deliberately, systematically, and efficiently modify behavior.

REINFORCEMENT MENU

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Eliminating or Decelerating Undesirable Behavior*

In some sense it would be nice if our only job were developing behavior and we could concentrate on that. However, there are many times when a child has behavior that is detrimental to his physical well-being or behavior that is incompatible and interfering with the development of appropriate behavior. Some examples of undesirable behavior are head banging, certain kinds of stereotyped behavior, "dawdling," tantrums, and getting out of seat. Fortunately, there are methods for dealing with these and other undesirable classes of behavior. The following techniques or procedures may be used to decelerate undesirable behavior.

Contingency Contracting

Homme, Csanyi, Gonzales, and Rechs (1969) suggested ten basic rules for the writing of contracts for application in the classroom. They are:

1. The contract reward should be immediate.
2. Initially, contracts should call for and reward approximations of the desired behavior.
3. Contracts should provide frequent rewards in small amounts.
4. Contracts should encourage and reward accomplishments rather than obedience only.
5. The performance required in the contract should be rewarded after it occurs.
6. Contracts must be fair to all concerned parties.
7. The terms of the contract must be clear.
8. The contract must be honest.
9. The contract must be positive.
10. Contracting, as a method of behavior management, must be used systematically.

FOUR ADDITIONAL RULES FOR WRITING CONTRACTS ARE:

1. The contract must be negotiated and freely agreed to by both parties.
2. The contract must include the desired achievement or production level.
3. The reward must be consistently presented to the individual in accordance with the terms of the contract.
4. The contract must include a date for review and renegotiation.

*From an abridged paper by Frederic L. Girardiau.

1. **Physical Restraint**

In some cases, such as thumb sucking, head banging, and getting out of seat, physical restraint may be used. This procedure, however, has an undesirable effect in that the person cannot utilize the restrained body part to perform desirable activities. Therefore physical restraint probably should be used only as a last resort for extremely undesirable behavior.

2. **Satiation with Rewards**

If a person is emitting a behavior which results in a reward, it may be possible to provide a lot of the reward at other times and thereby reduce its potency as a reward. If a child hits another child and receives teacher attention for it, then teacher attention given at other times may result in a reduction of the hitting. Unless coupled with a behavior development program, though, this procedure is effective for only short periods of time.

3. **Change in Constant Stimulus Conditions**

Sometimes a child will stop emitting a behavior when there is a sudden change in the environment (e.g., sudden noise), but the effect is usually only short-lived and not very useful in educational situations.

4. **Punishment**

One type of punishment involves the delivery of an aversive event following a behavior. When this is done, the rate of the behavior drops off quickly, depending on the severity of the aversive event. There are natural punishment situations built into the physical environment (e.g., not maintaining a proper balance results in falling, and looking in a different direction results in running into a door), and many punishing situations have been added (e.g., spanking, scolding, etc.). Although punishment can be quite effective, it may lower the rate of other behavior occuring at the same or nearly the same time and it also results in the deliverer becoming aversive. Hence, the child does not approach the teacher or parent as readily as before the punishment.

5. **Remove Positive Reward**

Another type of punishment is one in which a pleasant event is terminated when a behavior occurs. For example, television cartoons can be turned off when thumb sucking occurs and the result will be a reduction in thumb sucking (if watching cartoons is

a positive reward for the child). This procedure probably also has the same undesirable effects as the delivery of an aversive event.

6. Extinction

If you can determine the reinforcer maintaining some behavior, you can remove the reinforcer and behavior will decrease in frequency. Sometimes it is social attention (by peers, teacher, or parent) that is maintaining the behavior. In such a case, if you ignore the behavior and the environment does not change following the behavior, then the behavior will occur less and less frequently. This is an effective but sometimes time-consuming procedure in that the behavior may occur many times before there is a quite noticeable reduction in its frequency. Also, if you ignore the behavior several times and then reward it (with attention, for example), you now have the behavior on an occasional positive reward schedule and it will be much more difficult to eliminate. If you decide to use extinction, by all means do not give up too early or you have intensified your problem.

7. Substitute Desirable Behavior and Positively Reward It.

In most educational situations, this procedure is probably the most desired, both from the standpoint of its effectiveness and from the view that you are concomitantly developing desirable behavior. Good teachers and parents have been doing this for many years; very calmly they show the child an appropriate behavior model, get him to emit it, and then reward him heavily. Pretty soon the undesired behavior is no longer occurring; it has been replaced by the desired behavior. Where possible every teacher should try to use this procedure rather than those procedures which simply eliminate behavior.

TIME OUT PROCEDURES

Overview

Timeout is a therapeutic technique which involves removing a child from a reinforcing situation contingent upon specified behaviors. Although timeout has recently received much attention from educators and behavioral scientists, the basic timeout procedure has been used by parents and teachers for a long time. Its most common form, used frequently by parents as well as teachers, is to require a child to take a seat usually located in a corner of a room or some other out-of-the-way place and remain there until permission is given to leave. This **Activity Timeout** is often considered a type of compulsory "quiet time" which provides the child with a setting free from distraction so that he or she can reflect on his or her misconduct.

Activity timeout is feasible and appropriate when a child is under instructional control. For example, when told to "sit on the chair" or "go to your room" the child in fact does as he or she is instructed. However, timeout is sometimes necessary when the child is not under instructional control. When the child not under instructional control exhibits dangerous or destructive behaviors, it may be necessary to briefly place the child in **Environmental Timeout.** This is a treatment technique designated to alter the frequency of behaviors by removing a child from a reinforcing situation and placing him or her in an isolated area, a timeout room. The timeout room is simply a place where a child can be placed which provides no distractions. The area should be well lit, ventilated, and provide a means for someone to visually check the child without entering the room. The room must be sturdy enough so that the child cannot cause damage or leave until permitted to do so. When using this technique with severely disturbed children it is important to offer protection from the child hurting himself by throwing a temper tantrum while he is in the room. This is particularly important when the child's history indicates that he has demonstrated self-destructive behaviors in the past.

Environmental Timeout

Implementation of any procedure requires that its advantages out-weigh its disadvantages and timeout must be similarly considered. Timeout requires trained personnel, careful record keeping and a public information program to keep parents, teachers, advisory boards, etc. appraised about the rationale and justification for timeout procedures. The supervisory treatment staff must be particularly concerned with assuring that environmental timeout is used only with extremely disruptive, destructive, and/or aggressive behaviors exhibited by children that are not under instructional control. There must also be an emphasis on using timeout in conjunction with effective procedures that are designed to teach and support positive behaviors. Environmental timeout should never be used in the absence of a coexisting program to reinforce affirmative behaviors.

The purpose of environmental timeout is not to frighten a child, but to help him learn to control himself. The removal is for a short period of time--usually about five minutes--which is sufficient for the teacher to reestablish a calm atmosphere in the classroom or living unit. Once a child has become calm, he may return to the environmental area. There are no "grudges" held against the child. When he comes back he can literally "begin" his day as though nothing has happened. A timeout procedure is in contrast to an isolation procedure. In isolation, the child is put into solitary confinement for long periods of time in order to "get back at him" or to protect others in the environment from him. Once in isolation, there is nothing a child can do to shorten the period of punishment and when the child is released from isolation there may be no positive program for the child.

When one examines the alternatives to timeout for severely destructive and aggressive behaviors, there are several options that are apparent. First, corporal punishment (spanking) could be used. Although this may be effective with many children, it has major undesirable side effects. A child will learn to avoid and escape from the source of punishment. Assuming that the teacher wants the child to come to him/her for help in solving problems, then corporal punishment is inconsistent with this goal. Second, the child could be medicated. This may suppress the problem behaviors; but medication often suppresses all behaviors, including those which allow learning to take place. Third, the student could be removed from the program. But this alternative automatically eliminates the student from the learning situation, thus in effect timing him out from life. Fourth, the adult may be able to physically hold a child until he quiets down. This can be effective in some cases, but it often has

several drawbacks. It (1) gives the child the opportunity to fight or wrestle with the teacher for an extended period of time, (2) requires the teacher to be strong enough to hold the child in one spot (very difficult even with a small child and a strong teacher), (3) provides an ongoing "show" for the rest of the class, a source of attention which the target child may enjoy and find reinforcing, (4) tends to upset the teacher because it requires considerable physical effort, and (5) prevents the teacher from working with the rest of the class until the child in timeout can be released.

This examination of alternative procedures suggest environmental timeout to have fewer disadvantages than the procedures currently available for dealing with extremely disruptive or aggressive behaviors in children.

Guidelines for Using Activity Timeout

1. The child's parents or guardian, and teacher should agree in writing to the use of the timeout procedure; and where possible, parents should have the opportunity to actually observe the timeout procedure being used.

2. Timeout from positive reinforccement should be used only after it has been demonstrated that other procedures are ineffective or unfeasible.

3. The use of a timeout procedure must be accompanied by a concurrent and specific program to positively reinforce behaviors incompatible with the problem behaviors.

General Guidelines for Activity and Environmental Environmental Timeout

1. Matter of factly tell the child the reason for the timeout. Do not scold, argue, admonish or discuss the matter.

2. Do not give a second chance.

3. Be cool and calm.

4. When timeout is over simply open the door and say, "Timeout is over".

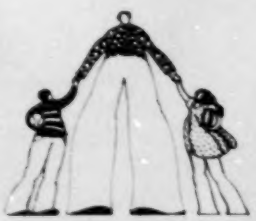
5. Be consistent in the use of timeout.

6. Do not carry a grudge. When child returns be sure to reward good behavior.

7. Keep timeout periods short. Three to five minutes will usually suffice. Use a timer so you don't forget.

8. Do not end timeout when a child is fussing, crying, tantruming or misbehaving in any way (unless danger or injury to the child is likely).

9. Children in timeout should be monitored at all times.



"I JUST KNEW YOU COULD SIT IN THAT CHAIR FOR FIVE MINUTES!"

THE HIERARCHY OF EDUCATIONAL TASKS

HIERARCHY LEVEL	ATTENTION	RESPONSE	ORDER	EXPLORATORY	SOCIAL	MASTERY	ACHIEVEMENT
Child's Problem	Inattention due to withdrawal or resistance	Lack of involvement and unwillingness to respond in learning	Inability to follow directions	Incomplete or inaccurate knowledge of environment	Failure to value social approval or disapproval	Deficits in basic adaptive and school skills not in keeping with IQ	Lack of self motivation for learning
Educational task	Get child to pay attention to teacher and task	Get child to respond to tasks he likes and which offer promise of success	Get child to complete tasks with specific starting points and steps leading to a conclusion	Increase child's efficiency as an explorer and get him involved in multisensory exploration of his environment	Get child to work for teacher and peer group approval and to avoid their disapproval	Remediation of basic skill deficiencies	Development of interest in acquiring knowledge
Learner reward	Provided by tangible rewards (e.g. food, money, tokens)	Provided by gaining social attention	Provided through task completion	Provided by sensory stimulation	Provided by social approval	Provided through task accuracy	Provided through intellectual task success
Teacher structure	Minimal	Still limited	Emphasized	Emphasized	Based on standards of social appropriateness	Based on curriculum assignments	Minimal

From Frank E Hewett, **The Engineered Classroom**

SECTION F

CAREER EDUCATION FOR THE HANDICAPPED

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Career Education for the Mildly Handicapped*

What is Career Education?

One definition that appears to be receiving considerable attention notes that:

> "Career education represents the total effort of public education and the community to help all individuals become familiar with the values of a work oriented society, to integrate those values into their personal value structure, and to implement those values in their lives in ways that make work possible, meaningful, and satisfying to each individual."

Its proponent further notes that there is an inherent assumption that the term "work values" encompasses a variety of work motivations including, but not limited to, the Protestant work ethic. This is an important assumption because, if one were to interpret this definition in terms of thee work values of the traditional Protestant work ethic, there could be a line of argument made against the concept of career education that would detract from its major thrust.

The implications of this definition for the handicapped are more easily described with the above perspective. For those educators of the handicapped and rehabilitation workers who have had to acknowledge that their own limitations, their perceptions of the limitations of some handicapped persons, and the availability of employment opportunities which resulted in the placement of handicapped persons in jobs that provide little challenge or dignity, there is some attraction to the interpretation of career education which holds that there are motivations for work other than personal fulfillment or identity realizations. The very structure of many of our work institutions in modern American society promote alienation from work and perpetuate anti-work attitudes among those who are more interested in survival and security than in self-actualization.

The important issue in interpreting this definition of career education, in light of the needs of the handicapped, is not to judge career education on the basis of one definition, but rather to see in it the possibilties of providing a common understanding of what the primary purposes of it might include and to accept it as an idealistic statement of intent. Rejection of career education should be a consequence of the unacceptability of specific applications of it in community settings rather than based on a philosophical position statement that may or may not reflect the intent of its advocates.

Goals of Career Education

For the benefit of those educators of rehabilitation personnel who have been led to perceive career education as a new name for vocational education in special education, the following summary of goals for career education are presented. These goals were initially established by the Bureau to Adult, Vocational, and Technical Education, U.S. Office of Education (1971):

1. To make all instructional subject matter more personally relevant through restructuring and focusing it around a career development theme when possible.
2. To provide all persons the guidance, counseling, and instruction needed to (a) develop self-awareness and self-direction, (b) expand occupational awareness and aspirations, (c) develop appropriate attitudes about the personal and social significance of work.
3. To assure all persons an opportunity to gain an entry level marketable skill prior to their leaving school if termination is necessary or a desirable option.
4. To prepare all persons completing secondary school with the knowledge and skills necessary to become employed or to pursue more training.
5. To provide placement services for every person in his preparation for a career, whether it be placement assistance in employment or further education.
6. To build into the educational system greater involvement and coordination of all possible resources in the community.
7. To facilitate entry and re-entry, either into the world of work or the educational system, for all persons through a flexible educational system which continually reviews and expands educational and occupational options.

Key Concepts in Career Education

As one reads between the lines in these formally stated goals, some dynamic, sweeping changes in education become apparent as consequences of efforts to implement them. Some key concepts that emerge, and that further clarify what career education is about, include the following:

*From an abridged article by Gary M. Clark in *Focus on Exceptional Children*, February, 1974.

1. Preparation for successful working careers shall be a key objective of *all* education. This implies that it is assumed to be appropriate for all persons pursuing an instructional program at all levels of education, beginning in pre-school and extending through adult education. It is appropriate for youth and adults, boys and girls, those who are academically talented and those who are handicapped, those who choose college and those who make other choices.
2. Preparation for careers will encompass the mutally important aspects of
   a. work attitudes
   b. human relations
   c. orientation to the realities of working environments
   d. exposure to alternative in choice of occupations
   e. acquisition of actual job skills
3. Every teacher in every subject matter area that has career relevance will emphasize the contribution that academics can make to a successful career.
4. "Hands-on" occupationally oriented experiences will be used as a standard method of teaching and motivating the learning of abstract academic concepts.
5. Instruction and guidance for career education will not be limited to the boundaries of a classroom, but will be expanded into the home, community, and employing establishments.
6. Career education will seek to extend its time boundaries, beginning in early childhood and continuing through the regular school years and adult years, allowing the flexibility for an individual to leave school for some work experience and return to school for further education or training when he chooses. In addition, it would include opportunities for adults to upgrade and/or update their skills or, if needed, change occupational roles. Further, it would give attention to the productive use of leisure time and the years of retirement.
7. Career education in no way conflicts with other legitimate educational objectives, e.g. basic education, citizenship, culture, and family responsibility. It is, however, a basic and pervasive approach to all education that provides a focus and unifying theme to which young and old, advantaged and disadvantaged, and intellectually and physically able and disabled can relate.

These key concepts are elaborations of the ideas, assumptions, and objectives that have been generated thus far regarding the concept of career education. Career education, like any other conceptual notion, does have some idealized statements describing a proposed structure which would move it from theory into practice. A discussion of these statements is appropriate at this point.

Career Education—A Proposed Structure

The U.S. Office of Education has formulated four models of career education or, rather, four alternative ways of facilitating career education goals. It is making substantial efforts in supporting research and development of career education by concentrating resources on the following four models of delivery systems:

1. School-Based Model
2. Employer-Based Model
3. Home/Community-Based Model
4. Residential-Based Model

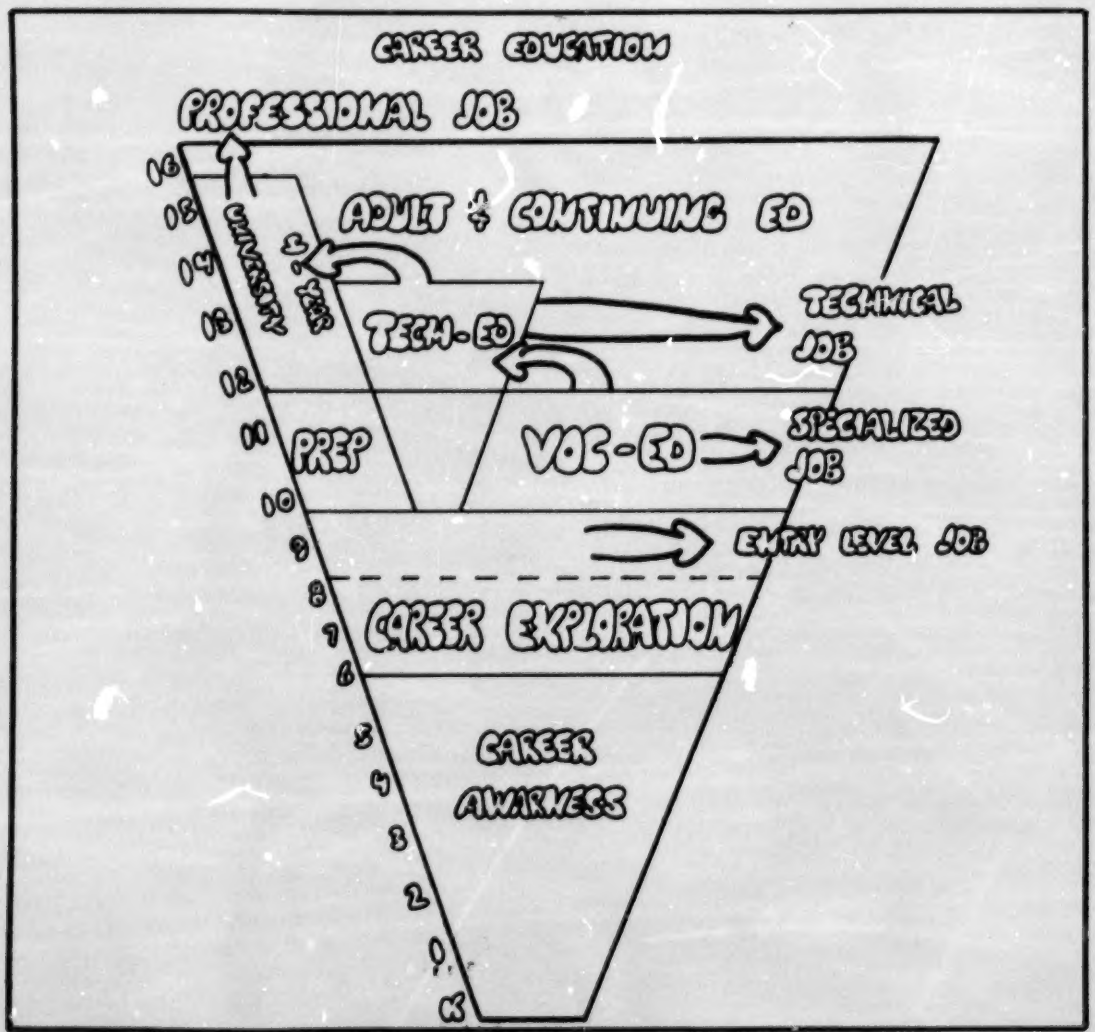
Each of these, in a unique way, can provide handicapped youth and adults some of the advantages of career education. Since many educators of handicapped may tend to be familiar with only the School-Based Model, each of the four will be described briefly to establish a perspective for the complete structure of career education.

School-Based Career Education Model

The School-Based Model for career education is being developed through a grant to the Center for Vocational and Technical Education at the Ohio State University in Columbus, Ohio Marland (1971) has presented one version of this model (see Figure 1) which describes the vertical and horizontal progression of career education as a pyramid that begins with "career awareness" in the elementary grades and moves from the general to the specific concerning an orientation to the world of work as the student progresses through school.

If one were to evaluate the School-Based Career Education Model on the basis of what appears to be the major thrust of this version of the model, it would be basically an occupational guidance and skill acquisition program which is a thinly disguised effort by vocational educators to infuse its objectives into a K-twelve curriculum sequence. A major criticism thus far of career education as a movement has been the continued difficulty for some in separating out vocational education from career education. The traditional conceptions and misconceptions of the goals of vocational and technical education become enmeshed in the schema to the point where parents, teachers, academicians, and students themselves lose sight of the complete scope of career education objectives.

The School-Based Model is intended to develop in students not only a comprehensive awareness of career options and the ability to enter employment in a selected occupational area or to go on for further education, but also a concept of self in relation to work, personal characteristics (such as initiative, resourcefulness, pride in work, etc.), and a realistic understanding of the relationships between the world of work and education. The emphasis being placed on career awareness, career exploration, and entry level job skill acquisition in this model reflect the most unique thrusts of the movement but, in the process, may be leaving the concept of career education vulnerable to undue criticism.



Keller (1972) has provided a summary of specific goals of the School-Based Career Education Model by educational level which include some helpful ideas in demonstrating the balance needed in career education concept and skill development:

Elementary School

1. Encourage development of work habits and realistic attitudes toward occupations and work.
2. Identify occupational groupings or clusters and integrate them into basic educational skill instruction.
3. Involve children in self-discovery activities.
4. Introduce instruction in problem-solving and decision-making.
5. Provide opportunities for pupils to render services to others.
6. Provide opportunities for pupils to observe and/or interact with selected community workers.

Junior High School

1. Orient students to (a) society and work, (b) occupational information, (c) self-knowledge, (d) career planning, (e) basic technology, and (f) occupational training through guidance and instructional activities in the subject matter areas.
2. Expose students to a wide range of occupations through exploration of clusters.
3. Provide for "hands-on" experiences in simulated work environments and personal identification with role models from the community.
4. Organize career development instructional centers for discretionary and prescriptive learning experiences.
5. Provide extensive career guidance activities.
6. Provide appropriate occupational preparation for students who have decided to leave school prior to completing junior high school.

Senior High School

1. Provide students with activities that unify basic subject areas with career development concepts and skills to make academic instruction more relevant.
2. Provide every student with intensive preparation in a selected occupational cluster or in a specific occupation in preparation for job entry and/or further training.
3. Provide extensive guidance and counseling services for every student.
4. Provide placement services for all students, upon termination of schooling, in (a) a job, (b) a post-secondary occupational training program, or (c) a 4-year college program.

Employer Placed Career Education Model

This model is being developed, operated and supported primarily by business and industry in cooperation with school systems. The target population for this model is the thirteen to twenty age group primarily and, as one might expect for an out-of-school option, many of the target population will be characterized as "unmotivated, alienated, and disaffected." However, it is intended to be a legitimate, viable option for any student. Its primary goal is to provide a comprehensive set of personalized educational experiences to junior or senior high school students who *voluntarily* choose to participate in this apporach to education instead of the traditional classroom approach.

Two key elements of this model include defining individual learning needs and locating actual work situations in which those needs can be met. A special attempt is made to allow each student to participate in the definition of those needs and in the selection of his own work situation from a variety of opportunities. The model provides for the completion of high school graduation requirements.

Home/Community-Based Career Education Model

The Home-Based Model is designed to reach individuals who have left the traditional school environment but who need or desire further education. The population for which this model is designed would range in age from eighteen to twenty-five and would include those who spend most of their time at home. This could include women during pregnancy or during preschool child-rearing years, unemployed persons, or handicapped persons with short-term or relatively permanent disabling conditions.

The primary objectives of the Home-Based Model generally are stated as follows:

1. To provide new career education programs for adults
2. To establish a guidance and career placement system to assist individuals in occupational and personal decision-making
3. To develop more competent workers
4. To enhance the efficacy of the home as a learning environment

The delivery of this model will take several approaches. One will follow a mass media approach with an emphasis on motivating individuals to study for career development. Television and radio will be the most frequently used media. Another approach will involve direct instruction to individuals at home via cable television, correspondence programs, telephone hook-ups, audio cassettes, radio, and instructional kits designed for specific content areas. A third approach to supplement the first two will be the establishment of career clinics in the community or neighborhood centers to provide personal career guidance and counseling, referral services, and information on relevant career-oriented education programs that are or will be avaliable.

Rural Residential Career Education Model

A typical criticism of many new education and training programs is that the only people who can benefit from them are those who live in urban environments or are close enough to them to be able to take advantage of such opportunities. The Rural Residential Model is proposed as a partial solution to this problem and offers what is perhaps the boldest, most imaginative model for the delivery of career education opportunities yet described.

It is presently designed to serve isolated, disadvantaged families or unmarried individuals from a geographical region covering no more than six states. It will attempt to provide rural residents with the development and/or improvement of employment capabilities appropriate for the area, provide stimulation for economic development of the area by introducing new occupational possibilities and training for them, and improving family living generally.

The model at this point is a research and demonstration project testing the hypothesis that entire families from disadvantaged or isolated areas can improve their economic and social situations through an intensive program at a residential center. This approach involves moving individuals and families from their home environments to a setting which is designed to provide a comprehensive array of services for accomplishing the objectives stated. Services will include day care, kindergarten, elementary and secondary education, career and technical education, adult education, parent/family assistance, medical and dental services, welfare services, counseling and guidance, and cultural and recreational opportunities for both single and married participants and their families.

Implications For The Handicapped

The implications of career education for mentally and physically handicapped individuals depend somewhat on the success of the movement within general education. As a concept, it has served to corroborate the proposals for occupational education and prevocational training for the handicapped which have existed for some time. However, as a movement, it will have varying degrees of impact on the handicapped as a group, depending upon the extent of its implementation.

At this point in time, most efforts at career education development appear to be concentrating on general programming and implementation procedures for regular education programs. Secondary special education programs based on a work-study concept are so compatible with the concept of career education that their teachers and coordinators may not see the advantages of incorporation into the entire model. On the other hand, career education leadership personnel may see high school work-study programs as areas that can be claimed as career education activities, but do not see them as being included in the total program to any greater degree than they already are included in the education system.

A more specific analysis of the implications of career education for the handicapped may be accomplished better by consideration of each of the career education models. The following sections will briefly evaluate the School-Based Model, Employer-Based Model, Home/Community-Based Model, and Rural Residential Model as they relate to handicapped children, youth, and adults.

The School-Based Career Education Model

The most obvious disability groups to benefit from this career education model are the mildly retarded and the learning disabled. Since these two groups are the largest within the public schools, it is to be expected that they will be accommodated as groups to fit into a career education program of some kind. Budke, Bettis, and Beasley (1972) reviewed twenty-six career education programs in twenty-two states and found that only about one-third (nine) claimed to have any special instruction for handicapped youth in career education and less than ten percent of the twenty-six programs provided a component for the educable retarded. It is not clear whether this information reflects lack of inclusion of special education programs in career education programming or whether the mildly handicapped in public schools

are becoming "invisible" to the extent that they are included in regular programs without labels and are consequently not treated as a special group.

The learning disabled children identified at the ages of nine or ten are now being recognized as students with assets as well as liabilities during their adolescent years and some special programs that emphasize academics are being provided.

Federal funds are increasingly being used to support programs for students who may or may not be defined as handicapped, but who need a program different from those available through regular or vocational options and those available through special education. Programs of this type include dropout-prone youth, learning disabled, educationally handicapped, socially maladjusted, and some who are or have been classified as educably retarded.

The School-Based Model emphasizes a sequential approach to career education that should influence programs for the partially sighted, hard of hearing, mildly developmentally disabled, and mildly orthopedically handicapped. These programs should feel the impact of what is being taught in the regular grades at the elementary and junior high school levels and make some curricular revisions to insure that students are receiving a comparable foundation in career preparation.

The goals of "career awareness which lends to career identity" and "self-awareness which leads to self-identity" are vital to career development for the handicapped. These two goals are especially crucial to the level of employment the handiccapped may eventually attain. Career identity and self-identity are demonstrated by what an individual allows himself to be guided into—by parents, teachers, counselors, friends, or circumstances. Handicapped persons have enough problems in dealing with the sterotyped career identity and preconceived ideas of the identity of the handicapped by the nonhandicapped to have questions about these themselves. The implications of this model on the long-term pursuit of these two goals by the handicapped are exciting when contrasted to what has been provided in the past.

Employer-Based Model

The Employer-Based Model could be instrumental in solving a major employment problem for many handicapped-exclusion from union membership. Legal obstacles and employment problems related to mobility and architectural barriers are problems best solved from within. The involvement of business and industry in career preparation on a contractual basis may prove to be one of the best things that has happened for the handicapped in some time. When business and industry are committed to a program that embodies the concept that career preparation is for *all* individuals, they can provide political and economic persuation that can go a long way in alleviating problems that educators and rehabilitation personnel have not been able to solve.

This model could have significant effect on the type of training and subsequent employment opportunities for those handicapped youth who receive most, if not all, of their high school vocational training in a state school, particularly schools for the auditorially and visually impaired. With some exceptions, the variety and level of vocational training in these settings are limited. Training in many instances is dependent upon obsolete and/or inadequate equipment or inadequately trained instructors who do the best with what they have. The possibility of going directly to potential work environments to obtain career preparation from highly skilled craftsmen or technicians using modern equipment is an encouraging development for the handicapped and those who have been frustrated in attempts to provide quality career preparation.

Home/Community-Based Model

A large number of handicapped persons find themselves employed seasonally or part-time, or unemployed due to pregnancy, small children at home, or mobility problems. Much of their time is spent in the home or immediate neighborhood and efforts to venture out are either too threatening, too expensive or too much trouble. It is for this group that the Home/Community-Based Model is ideal.

The use of mass media may be effective in stimulating interest in the possibilities of further career preparation. Beyond that, however, contacts and initiation of an educational program must be formalized if credit for completion is to be obtained. It is at this point that the neighborhood or mobile guidance centers should be able to assist the handicapped in making tentative occupational choices and arranging for appropriate home/community instruction.

Rural Residential Model

This model has basically the same implications for handicapped persons as nonhandicapped persons in rural areas. It is admittedly designed for the disadvantaged rural population, but where persons from rural areas are both handicapped and disadvantaged, as is so frequently the case, the servce is available and a unique possibility.

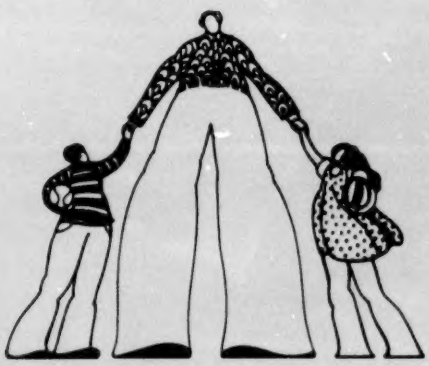
Summary

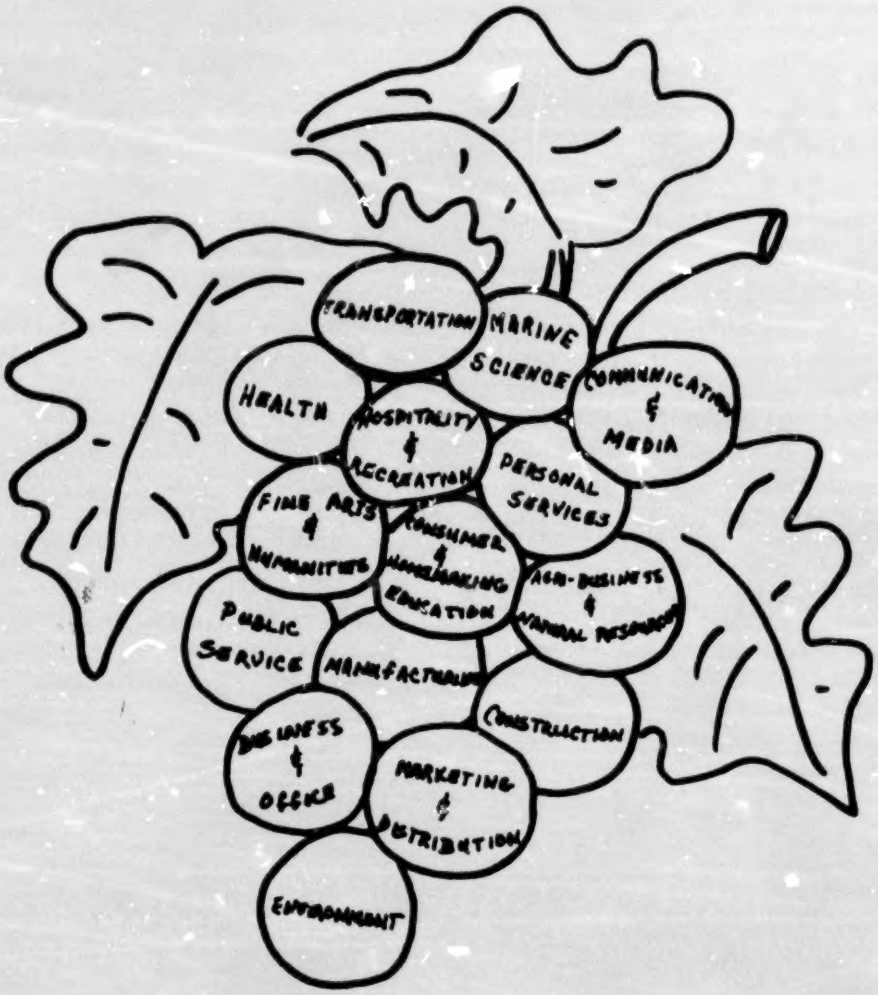
Career education, as a concept, is rapidly evolving into a movement with structure and definable parameters. It is still misunderstood by some as to its intent, its scope, and its structure; but, increasingly, more information is being made available to educators and the general public to respond to these misconceptions. As it evolves into what it is to be, there need to be continuous reminders of what career education is not:

a. it is *not* vocational education with a new name.
b. it is *not* a new educational movement to replace or downgrade academic education.
c. it is *not* a system bound to traditional school ages.
d. it is *not* a program to be limited to any one environment.
e. it is *not* training for a single occupation.
f. it is *not* a program for one educational population.

When one defines "career" as Gordon (1979) does "....the course by which one develops and lives a responsible and satisfying life," there is a distinction made in the term that differentiates it from the traditional meaning—e.g., a succession of jobs or occupational roles. Career education based on Gordon's definition concerns itself with a merging of liberal education and vocational development such that it facilitate the *process of living* and is not limited to facilitating the *process of making a living.*

The mildly handicapped fit into the schema of career education as readily as any group and stand to gain from its offerings. Those interested in their welfare, however, must move aggressively into the arena of ccareer education development if there is to be a significant impact from the movement on the careers of the handicapped.





OCCUPATIONAL CLUSTERS
(u.s.o.e.)

Career Exploration for Handicapped Pupils in the Middle Schools*

Introduction

Historically the junior high school emerged during the early twentieth century when dissatisfaction with the 8-4 grade arrangement spurred an era of educational reforms. The junior high school was created to mediate between the childhood education offered by the elementary school and the adolescent education offered in the senior high school.

Currently the junior high has become a target for criticism for failing to meet the goals set forth for it. After all, the junior high concept was created during a time and in a society very different from our current one. Further, the junior high was created to deal with problems that existed some 60 years ago for a certain generation of children. Our current generation of junior high age students differs markedly in physical, physiological, psychological, and cultural characteristics. To meet the challenge of the "new" needs of pre and early adolescents, the middle school concept has emerged.

The arrangement of the middle school includes grades 6-7-8. This school arrangement is designed to;

a. provide a program especially adapted to the wide range of individual differences and special needs of the "in-between-ager."
b. create a school ladder arrangement that promotes continuity of education from school entrance to exit.
c. facilitate through a new organization the introduction of needed innovations in curriculum and instruction.

To ensure that these desirable goals for the middle school are accomplished, Dettre (1978) has called for parity and a separate identity for the middle school which allows "the presence of increased amounts of learning in such areas as practical arts...physical education, recreation, and career education..." Other writers have noted that the middle school concept is grounded upon the need for innovative ideas and new processes.

The area of career education at the middle school level, especially applied to the needs of exceptional students of one major area, warrants such innovation. To this end this article will focus attention upon those educational experiences and activities which can be initiated at the middle school level to provide career education experiences for the exceptional students.

Career Exploration

The process of career education during the school years is generally acknowledged to include career awareness (grades K-6), exploration (grades 7-8), orientation (grades 9-10) and preparation (grades 11-12). Although the great number of career awareness materials available for elementary students is aimed at non-handicapped populations, modifications could be made to facilitate their use with handicapped children.

Further, ample literature is available regarding programs that can be utilized for orientation and preparation activities with high school-aged handicapped pupils.

There seems to be, however, a dearth of literature regarding appropriate activities that may be utilized to provide career exploration experiences to middle school handicapped pupils. In the broadest sense, career exploration may be defined as the provision of opportunities for handicapped pupils to explore the world of work under both simulated and real conditions. Career exploration involves experiences with tools, materials, processes, and the personal relationships involved in various work situations. This phase of career education contributes to the development of knowledge of oneself and realistic career goals to be pursued in the career orientation and preparation phases.

The remainder of this article is devoted to a description of activities and experiences that can be employed to provide career exploration content to the middle school exceptional student. These activities are arranged in such a fashion as to provide continuity between the career awareness process and the career orientation and preparation phases.

Career Exploration in the Classroom and Community

It has been often stated that career education occurs both in school and out in the real world. Nowhere is the statement more evident and necessary than in the career exploration stage. One of the best "classrooms" in which to explore career options is the area vocational technical school

*From an abridged article by Allen A. Mori in *Career Development for Exceptional Individuals*, Winter, 1979.

(AVTS). Many AVTS's are developing special exploratory programs for middle school students. These exploratory programs are usually designed to provide students with the opportunity to spend a predetermined (and limited) amount of time engaged in typical training activities in areas of interest. The exploration is usually structured to cover a grading period or nine-week quarter with students spending apporximately two to two-and-one-half hours per day at the AVTS. Since most AVTS's have many more training options than students could feasibly explore, careful planning must preceed the placement of handicapped students. Often the best way to maximize the exploration phase is to determine student interests and aptitudes prior to structuring an exploration experience. This information can be gathered in a number of ways including an analysis of the student's career awareness experiences and/or administering interest inventories and aptitude batteries designed specifically for handicapped populations.

It is extremely important for the special education teacher to determine the students' reactions to the various career options being explored. The emphasis here should be placed upon gathering sufficient data to assist the student in making realistic selections for the career orientation phase.

The community is an excellent laboratory for career exploration programs. Carefully planned and conducted field trips can augment other forms of career exploration. Of course, depending upon the size of the community, the potential sites for field trips may be great or limited. The teacher must be familiar with the various options available as field trip sites. Further, the selection of sites should take into consideration the following:

1. The particular occupation or occupational cluster should be suitable for employment of the handicapped.
2. The site should offer a range of jobs within a cluster rather than be limited to a single or few jobs.
3. The site should provide a "tour guide" who is knowledgeable about the operation of the business and can answer questions regarding qualifications, salary, and other parameters of the various jobs at the locations.
4. It is helpful if the site is one being utilized for job try-outs or on-the-job training in the cooperative education or work study program. Clark (1979) suggests that certain criteria be established for the field trip so that objectives are clearly understood by pupils, teachers and people at the field trip site. A checklist should also be provided for the field trip planning to assist the teacher in this important activity. Since the field trip idea can be abused and is often maligned as a frivolous activity, the special education teacher must take care to follow a few simple steps prior to taking any field trip:

   a. obtain information about school districts and/or school rules and regulations governing field trips;
   b. secure parental permission, get required forms signed, arrange transporation, and so on;
   c. develop specific outcomes (objectives) you want to accomplish by taking students on the trip;
   d. if possible, visit the field trip site yourself prior to taking the class to gather information about the site. It is also helpful if you can take some color slides of various activities at the site;

5. Conduct a pre-field trip, in-class experience to acquaint students with the various important elements they will be seeing and experiencing. Allow students to view the slides to become more familiar with the site. This will provide some needed "readiness experiences" and also allow the actual trip to be more reinforcing.
6. After the trip, plan activities which allow students to discuss the visit and perhaps to follow-up activities (i.e., read about the type of job or see filmstrips) involving the occupations they have seen.

If field trips are properly planned and the sites are carefully selected, it is possible for the teacher to cover the most important core jobs within each of the clusters. It is also important for teachers to coordinate their efforts throughout the middle school experience so that they may share their expertise and prevent needless redundancy of activities and field trip experiences.

If field trips cannot be planned by the teacher, then visiting various sites and taking color slides can still be a highly useful activity. The teacher should plan to shoot enough slides to make a 10 to 12 minute presentation. The slides can then be coordinated with a tape cassette to make an excellent slide tape presentation which can be used again and again. The teacher can repeat this activity for a number of jobs within clusters and develop a library of these materials.

Simulated Work Experiences

The actual use of simulation activities in special education classrooms is not a widespread practice in spite of the fact the simulation can be a powerful tool to motivate learners at all ability levels to become more deeply involved in the educational process. Wagonseller and Mori (1977) described numerous activities designed to actively involve special education students in a variety of situations demanding differing levels of skills and abilities. Fleres (1975) has provided an excellent description of an exploration program for mentally retarded pupils in the junior high school.

When planning simulated work activities, the classroom teacher should be promoting the acquisition and refinement of career awareness skills and attempting to provide opportunities for youngsters to experience the world of work under a variety of conditions. Since simulation actually involves the use of the actual tools and equipment of various jobs, it may be necessary for a program of this type to involve a number of middle schools, pooling their resources or become part of a district-wide program.

Initially, the teacher may wish to select a few areas where exceptional youngsters would be able to find occupational opportunities. Thus, simulated experiences might include work in the food service area, automotive repair, and some aspect of the construction trades (i.e., painting or wallpaper hanging). Once several areas have been identified, it will be necessary to obtain the tools and equipment of that job, structure, and a location for the simulated job to occur.

The teacher should develop specific objectives for student acquisition. However, emphasis should be on the development of both appropriate attitudes toward work and behavioral expectations of daily employment. Actual skill acquisition, while of some importance, is not nearly as critical as becoming familiar with the tools and materials of the job area in order for the students to develop more realistic career goals and begin to formulate some career choices for the orientation phase.

While students work in the simulated jobs, they should be paid for displaying appropriate work-related behaviors and attitudes. Real money is an ideal, but it may not be feasible or economical to provide this incentive to the students, so a token or play money system may have to be developed. Regardless of the alternative chosen, the "money" earned may be used to teach other skills such as banking, budgeting, consumerism, the meaning of withholding tax, and social security. In addition, students can be taught about grooming, hygiene, appropriate work dress (i.e., uniforms or overalls) and other facets of work related requirements. Evaluation of this program should be based upon improvements in clearly identified behaviors and attitudes and may be accomplished by pre-post testing.

Industrial Art Experiences

Gold (1976) and Mori (1979) noted that mildly handicapped students are rarely integrated into meaningful career preparation programs. When handicapped students are integrated, they are often exposed to machinery, procedures, and techniques with little assistance and unrealistic standards for performance. Meaningful integration of handicapped pupils into mainstream industrial arts programs will require a careful redesigning and structuring of the shop environment to permit the acquisition of specified instructional objectives. In this fashion, handicapped pupils will be able to meet success along side their non-handicapped peers.

Included among objectives that handicapped students acquire through participation in this experience are the following:

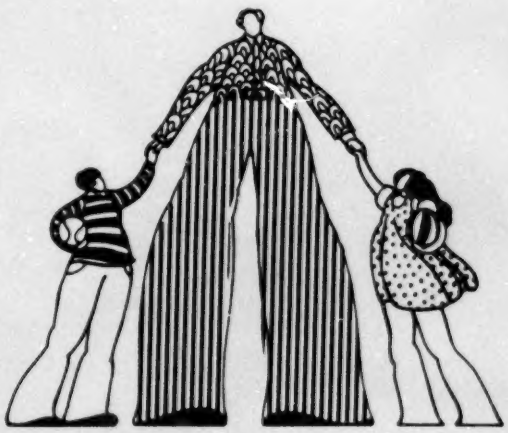
a. demonstrating appropriate compliance to the standard safety rules of the shop;
b. identifying the tools used in the shop;
c. identifying the materials required to complete a shop project;
d. identifying andd following the appropriate process in completing a shop project;
e. gathering the materials, identifying the process, and using the tools safely to complete a shop project; and
f. using tools to make simple household repairs.

The special education teacher must work cooperatively with the industrial arts teacher to assist in the determination of an instructional sequence for presenting the shop's safety rules. All handicapped pupils must "check out" on safety rules prior to their entrance into the exploratory program. Further, the special education teacher and shop teacher may collaboratively determine any modifications that may have to be made to tools, equipment, and/or the shop's physical environment to meaningfully and safely accommodate handicapped pupils. Breaking the instructional objectives and sequences into smaller increments may also be done jointly with the special educator providing additional instructional and facilitative support in the resource room setting.

In addition, the industrial arts experience can be maximally enhanced as an exploratory activity for handicapped middle school pupils if shop construction activities are correlated with other subjects the youngsters are studying. For example, if the exceptional students are studying plant life in science, perhaps a small greenhouse can be built in the shop class. If the community is being studied in the social studies class, a scale version of the town could be built in the shop. Thus, if the special educator, the mathematics, social studies, and science teachers (as well as teachers of other classes where handicapped pupils are mainstreamed) work together with the industrial arts teachers, the total career exploratory program can be thoroughly integrated into the students' total middle school educational experience. In this way career exploration does not become an appendage of the educational program--rather it becomes an ever-present element.

Further and similar exploration activities may occur in other areas of the practical arts including agriculture, home economics, office occupations, technical education, and trade and industrial occupations. Thus, handicapped students would be involved in experiences which would increase their knowledge of the roles, vocabulary, tools, materials, and processes of one or more of these areas. In this fashion, the exploration phase serves the purpose of helping students to understand themselves and make important decisions regarding career choice.

As the emergent middle school struggles for its identity, career exploration for the handicapped is struggling to become a carefully planned and integrated component not only in the middle school curriculum, but also in the continuum of career education experiences. The means to implement this component are available to us, we simply need to take the initiative to make it a reality.



PLANAREA

A Work Experience Program in Rural Areas*

Introduction

Organizing meaningful work-study programs for handicapped youth living in rural areas presents a many faceted challenge. The limited number of students who qualify for the program, the limited number of professionals available to organize and operate the program, and the difficulty in locating appropriate community jobs head the list of problems to be overcome in meeting the challenge. Transportation, the bane of many good programs, creates additional stresses.

Solutions to the above problems can be found, however, and high quality work-study programs in rural areas can be organized. For such a program to be successful, the people involved must first commit themselves to the belief that career education for handicapped youth is vital.

Components of a Work-Study Program

Most educators will nod their heads in agreement with the concept that career education is extremely important throughout every student's elementary and secondary school program. Difficulties may arise, however, when these same educators are asked to devote their energies to the difficult and time consuming task of actually implementing a good career education program.

Career education for all children must begin in the first years of school. At that level the child should begin to understand what work is, what his parents do, and that even classmates have school jobs such as picking up papers. The concept of career education grows and expands through high school to the point where career education becomes a major component of the student's education. Students graduating from any program, particularly a special education program, need to understand how to find and keep a job and how to get along with themselves and others. These goals are crucial in a career education program.

All high school students need to understand that work is important and is a legitimate use of time. Some students may not have a good parental example from which to learn the importance of work. Many students have to be taught that each person can be a productive, contributing member of society by working on a job. In addition, the high school program needs to schedule adequate school time to thoroughly survey the jobs available in the community and geographical area and to study what kinds of occupations are suitable for the students. Students also need to develop worthy uses of leisure time. They need to be counseled on their own aptitude and interests.

The school guidance counselor and special education teacher both have a responsibility to work with the handicapped students in career education. The vocational rehabilitation counselor should also be part of the professional team providing services to the handicapped student. The culmination of this program is appropriate job training at the high school level.

These, then, are the important components of a work-study program for handicapped students. A work-study model incorporating these components has been developed and implemented in a rural Iowa county.

First Year Work Experience

The actual work experience aspect of the Iowa career education program for handicapped youths began during the junior year of high school. Other school districts developing similar programs may want to start this work experience program earlier.

All students who were eligible to begin the work experience program were evaluated before the junior year of high school to determine the student's strengths and weaknesses and to find suitable school work stations for the child. The child's teacher, school psychologist, director of special education, vocational rehabilitation counselor, and regular school administrator were involved in this initial planning. The students were counseled in developing their own work plan. Each student's parents were scheduled for a conference during which they were informed of the work plan for their child. Parents' ideas about the school job, future jobs for their teenager, the school's plan, and ways these plans should be modified were discussed and used in planning.

During the junior year, each student was employed in the school, e.g., helping in the cafeteria, helping the janitor, washing towels, working in the bus barn, or helping the school librarian.

*From an article by J. Gary Hayden in *Teaching Exceptional Children*, Vol. 7, No. 4, Summer 1975.

The variety of jobs available in any program will depend on the job possibilities in the school and the imagination of those planning the employment.

A critical factor in the school work program is the student's supervision on the job. The only occasion a student's assignment had to be changed in the Iowa project resulted from lack of supervision and lack of enough work to keep the student busy. Only minimal problems occurred when the student's time was scheduled so that he was busy during the entire work period and when he knew he was being supervised.

Each student was scheduled to work 2 hours a day, with the school paying the student for his work. The student had to keep a time slip and turn it in to the school in order to be paid. In the Iowa project, the school requested a waiver from the Federal Wage and Hour Division of the Department of Labor to pay below the minimum wage. It was felt that it would be better to begin the wage at a lower level so raises could be given to the student as he learned the job. In this way the improvement would be rewarded by higher wages.

The basic goal of the junior year work program was for each student to develop appropriate job habits and attitudes. It was hoped that the first year school employment would teach the student to get along with his supervisor, to be prompt, to be willing to listen and accept instruction, to follow directions, to work alone, to be neat and clean, and to accept criticism.

An evaluation form is completed at the end of the the junior year. This evaluation form should be discussed with the student to indicate how he is doing in the work program. It is also important to meet regularly with the student's job supervisor so that problems can be identified and solved as they arise. Initially, these discussions with the student and his supervisor should be held every 2 weeks. Later the meetings can be held monthly. In addition, the student's teacher can serve as a continual monitor, talking frequently to the student about his job.

The first year of work experience can be summarized as follows:

1. Evaluate the student to determine the best program for him.
2. Plan appropriate school employment for the first year.
3. Be sure the student is supervised on the job.
4. Emphasize appropriate job habits and attitudes rather than learning a particular occupation.
5. Continually monitor the progress of the student's program.

Work Evaluation

An important component of a total work experience program is work evaluation. This is a formal program assessing the student's occupational strengths and weaknesses and making appropriate recommendations on the types of occupations suitable for the student. Most work evaluation programs evaluate the areas of independent living skills, counsel on occupational preferences and personal growth, provide work samples to determine occupational skills in a number of vocational areas, and make student recommendations in the above areas.

The students attended the work evaluation center for 3 to 6 weeks in the spring or summer. Since the center was located 25 miles from the home school district, transportation was a major problem for this part of the program. Some students commuted every day and others stayed in a group living center during the work evaluation. This particular work evaluation center was administered by the Division of Vocational Rehabilitation, which also sponsored the group living facility.

At the work evaluation center, the student typically tries three or four different types of jobs so that the student's abilities and interests can be matched. Tests such as the General Aptitude Test Battery are administered to determine occupational strengths. Job recommendations are made based on all information available at the completion of the work evaluation program. These recommendations are used to plan the student's senior work experience.

Second Year Work Experience

The work program during the senior year of school was typically an out of school placement. Jobs held by the students included work in a nursing home, on an assembly line, in a manufacturing concern, as a service station attendant, as a janitor, and as a baker's assistant. The types of jobs available for any program will depend on the community itself.

1. Introduction

The basic goals of the senior year work experience include (a) learning a job skill that may be used after graduation, (b) learning to work independently on the job, and (c) continuing to develop positive personal habits and attitudes. The senior year work experience may be a training job that will terminate at the end of the school year, so

that the work station can be used for another trainee the next year, or it may become a permanent job for the student who can gain the necessary job skills during his senior year. A combination of the two types of job stations can be used in a program, but there are many advantages for the student if he is able to continue in the same job after graduation. He will already know the job and the particular business, and this continuity can help the student adjust to the work of work after school. It presents the problem, however, of locating new training positions each year. Which method a school chooses will depend on the composition of the local area.

Four other points need to be made about the senior year work experience.

1. If a student is not working satisfactorily in his assigned job, the assignment should be changed to one where he can achieve success. A job station in which the student cannot function adequately is not a good work program and does not provide the student with the post school skills he will need.
2. Some students are not ready for competitive employment during their senior year. For these students a more controlled work program in the school is preferable. Following the senior year those students who need further job training can get it through vocational rehabilitation programs or a work activity program in a sheltered setting.
3. Some students who perform adequately in a community job may still need further vocational training in a specialized field after high school graduation. This decision must be made on an individual basis.
4. All students in work programs need continual supervision. A regular schedule of supervision by the employer and by school personnel, including discussions with both the employer and employee, should be developed. The employer should use an evaluation form provided by the school. This evaluation should emphasize work skills, industriousness, reliability, cooperation, appearance, and personality. This form differs from the form used during the first year of the work program by placing emphasis on work skills rather than job habits and attitudes.

Organizational Considerations

Communication and Commitment

Communication is an extremely important aspect in any work experience program. Informal and formal discussions and conferences must be held to organize the work experience program. These conferences should include the superintendent of schools, principal, special education teacher, director of special education, school psychologist, school counselor, vocational rehabilitation counselor and others who can assist in the program.

The career education program and work experience program should be discussed with community groups (e.g., Kiwanis, Lions, Chamber of Commerce, church groups, women's groups) to gain the groups' understanding and general support of the program. Many times these presentations will lead to specific contacts where an employer will offer a job station possibility.

Those planning such a program should also meet with potential employers at their convenience to fully explain the program. They should be sure the employer understands what the individual students can and cannot do, that daily on the job supervision is their responsibility as an employer, that special education personnel will offer regular consultation with the employer and that the students must be paid for their work. The potential employer must also understand that no student will be continued in job station where he cannot perform satisfactorily.

A great number of potential employer contacts must be made in order to find enough work stations. The program should be fully explained to all potential employers, even though they may not have a job station to offer this year, since they might have one next year. Some employers will initially say "No" to a job station, but will later decide to participate when they understand the program better. Follow up visits will be necessary after the potential employer has had time to think about it.

The Iowa program found it helpful for two persons to make these employer contacts. In this way two professionals, such as the director of special education and a vocational rehabilitation counselor, can work together to give a more complete description of the program. Organizing a work experience program requires considerable time and leg work. Numerous contacts and follow up visits have to be made to develop the needed work stations.

The school and all employers must understand the financial commitment to the program. Students in the work programs, both in the school and in the community, must be paid. If needed, the school or business may apply for a minimum wage waiver. This will allow an increase in the child's wages which he can recognize as a reward for improved job performance. Employers should pay the student

with their funds since the student is performing work for their business. The employer is more involved in and committed to the project if he pays the wages rather than letting the Division of Vocational Rehabilitation, the school or a special fund assume that cost.

Parents must be kept informed and involved throughout the work program. Individual conferences should be held that fully explain the student's program. Parents should be encouraged to give ideas on potential occupations for their child.

It is helpful to form an advisory committee to make suggestions and recommendations regarding the total program and to serve as a public relations group. The committee can be composed of school personnel, special education personnel, employers, and parents. This gives the school a way of assisting community leaders and employers in promoting the program throughout the community.

Job Placement and Scheduling

Determining the best placement for a particular child can sometimes present a problem. Placement has to be based on the individual strengths of the student, but the community job placement does not have to be considered a lifelong placement. Present statistics indicate that most people change occupational fields three to five times during their lifetime. Numerous job changes are not uncommon regardless of the skills of the individual, and this applies to students in work experience programs as well. The job placement also does not need to be the one that will pay the most money to the student. More important for the student is that he can perform the job well, get along with fellow workers, and be happy in the job.

Transportation can create problems for the total work experience program. Many times transportation problems force the school to be creative in scheduling the work program. The school may have to work around a transportation schedule rather than fighting it, scheduling the work experience to fit the transportation schedule. The student's work experience should take precedence over school classes. The work program should be scheduled for the time it is most feasible and when the job needs to be done, rather than when it best fits into the school schedule.

The student should receive a high school diploma upon completion of the work experience program. A high school diploma signifies the completion of a prescribed course of studies. The work experience program meets this criteria. It signifies that the handicapped student has worked as hard to complete his program as other students have worked to complete theirs, with completion being based on what is appropriate for the individual student. The work experience program recognizes the need for individual programing for school students regardless of ability or handicap.

Concluding Comments

Establishing a good work experience program takes time and patience. Numerous contacts with school personnel, parents, students, and community employers must be made. Communication, job supervision, and continual planning are essential. Through these efforts, however, a meaningful work experience program can be developed which will greatly assist handicapped students in finding and succeeding in competitive employment after graduation.

SECTION G

WORKING WITH PARENTS

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INVOLVING PARENTS IN EDUCATIONAL STAFFING

Schools are inviting parents to participate in educational staffings when their children are being discussed. Parental involvement helps to insure that the legal rights of children are protected, and it offers the opportunity to establish a positive relationship between school and home

EXPLAINING

When parents are invited to participate in the staffing, some explanation of the staffing process should occur. This explanation should include:

- The specific reason for the staffing.
- The types of alternatives that might be explored.
- The people who will be present.
- The parents' role at the staffing.

Parents must understand their role prior to the staffing if they are expected to feel comfortable during the staffing. They may be asked to provide information about the child's activities at home or the attitudes the child has toward school activities. They may be asked to give their opinion of the appropriateness of educational alternatives after hearing them discussed.

BEGINNING

Unless everyone is at ease, an open discussion of the problem and alternatives will not occur. Procedures for beginning the staffing include:

- Introduction of participants, name and role.
- Statement of the problem, i.e., events that have lead to the staffing and what is hoped to be accomplished.
- Procedures in receiving information, pursuing alternatives, and reaching a decision.

CONDUCTING

At times information may be presented or terms may be used that are not understood by everyone present. By being sensitive to each person's area of expertise, the chairperson can request clarification, provide a restatement, or summarize what has been said. The parents should be asked directly by the chairperson if they have questions about someone's report or an instructional option being discussed.

CONCLUDING

The chairperson has the responsibility of summarizing the decision to insure that everyone understands it and the resulting actions. Someone should be designated as a person for the parent to contact if immediate questions occur as a result of the staffing, or if questions come up in the future.

Parental Roles in Special Educational Programming: A Brief for Involvement*

Within the past decade there has been a major transformation in how the relationship between home and school is perceived. Whereas in the past parents have not been regarded as useful contributors to the educational process, more extensive parental involvement in the schools is now increasingly viewed as essential by many educators.

This change of attitude stems from a variety of sources. Professionals in early childhood education have consistently found that parental involvement facilitates effective preschool programs. Educators serving the disadvantaged and culturally different have found that extensive parental involvement is mandatory if they are to realize their program goals. Even special educators, long accustomed to regarding parents as potential sources of children's problems, are finding parental involvement to be an essential factor in the success of their educational programs.

Overriding these specific examples of program necessity are the basic facts of educational life in the 1970's—the revolt of the taxpayer and demands for improved educational quality for the tax dollar. The taxpayer's revolt in education does not stem exclusively from economic sources, however. We are also faced in many places with an intense public alienation from the schools—because meaningful involvement has so long been discouraged.

For these reasons many professionals in both general and special education view parental involvement as a potential solution to pressing educational problems. The literature of involvement is rapidly growing, and hot debate rages over its relative extent and desirability. This paper will consider the issues involved and make some suggestions.

Objections to Parental Involvement

Despite the growing number of educators favoring parental involvement, many nonetheless disparage extensive involvement. In most instances their objections to involvement are qualified—they are more likely to suggest limitations upon involvement rather than to completely reject parental roles in their child's educational process.

There are several major reasons for professional disparagement of parental involvement in public education. These center around the complexities of the modern educational process and the commonly observed phenomena of parental indifference, malignance, and related mismanagement of childraising. The following discussions clarify each of these points.

Complexities of the educational process

A modern educational system routinely deals with a bewildering number of complex teaching methods and materials. A standard 4-year program of teacher preparation barely enables the graduate to cope with these complexities, and these complexities, in turn, tend to rule out all but the simplest forms of parental involvement. As Ambinder (1969) observed, even common child-management techniques may be too difficult for the average parent.

In special education the complexities of the teacher's task have led many authors to question the value of extensively involving parents of handicapped children. Brown (1969) for example, suggested that parent-teacher interactions be limited to the standard conference and specifically warned parents against any involvement with their child's academic-remedial program. Other authors have pursued such limitations one step further by suggesting that meaningful involvement for parents of the handicapped should occur only through professional counseling and psychotherapy.

These and similar suggestions in the literature stem from the basic assumption that education is now too complex and important a process to accommodate extensive parental involvement. Far better, it is often implied, to pursue no involvement whatsoever than to risk interference with the proper functioning of professional school personnel.

Parental indifference and malignance

Parental mismanagement of the child-raising process is a commonly observed phenomenon. Through inconsistent discipline, less than meaningful communication about realistic standards for behavior and accomplishment, and failures in their applications of love and encouragement, parents disorder child-raising. This may result in the development of social and emotional behavior problems which jeopardize the child's educational growth. For this reason many special educators fear parental involvement in the school lives of their

*From an article by Edward J. Kelly from *The Journal of Special Education.*

children. Several exceptionalities, particularly those categorized under the labels of "emotional disturbance" and "mental retardation," reflect the etiologic influence of parental mismanagement and/or inadequacy. In such situations extensive parental involvement in the educational process may simply aggravate a child's professional efforts to remedy or modify them. In this context the comments of Sperling (1965) are appropriate:

> *Parents, of course, often have valid cause when they complain, "you only treat the child, but we have to live with him." But while the parental plight is a difficult one, we must remind them that what the child is today is in most cases the result of years of faulty upbringing and the parent's inability to change even their most obvious attitudes toward the child....in fact, I have often marvelled at how many children change through treatment in spite of their parents.*

Indicators of parental culpability—accompanied by even more common descriptions of parental guilt and shame concerning their child's handicapping condition—permeate the literature of special education. These have led to a widespread disparagement of any involvement that goes beyond professional counseling designed to help the parents cope with their emotional problems. Indeed, in such an atomosphere even teacher-child interactions which are not professionally supervised have been suspect.

The limits suggested here for parental involvement are intended to restrain unwarranted parental interference with the complex educational process and involvement in special educational situations when disordered parent-child relationships are indicated. At the same time, many classroom teachers and school administrators have been subtly influenced by such proposed limits to parental involvement by applying them in situations were restraint is *not* called for. For some school personnel, such restraints justify rejection of any and all involvement with parents. Others impose restraints on involvement in situations which do not correspond to the context of the original suggestions for limits. In either case parental involvement is restrained—often, unfortunately, in ways which are unnecessary and harmful. In the next section we will consider some consequences of this improper restraint by presenting contrasting rationales for involvement.

A Brief for Involvement

There are several rationales supporting parental involvement in the schools: the concept of education as a parental responsibility, professional perceptions of involvement as a necessary feature of special education programming, and the dominant trend of contemporary research on types of parental involvement. The following discussions expand upon each of these major themes.

Education as a parental responsibility

In this country education is essentially a parental responsibility. Parents choose the schools they want their children to attend, a right limited only by the society's insistence that schools adhere to basic quality standards for buildings, materials, curriculum, and staff competence. The point here is that schools are not merely creations of the state. They do not belong to teachers or school administrators, who function legally only as parent substitutes. Rather, schools belong generally to the people and, more specifically, to parents who support them as taxpayers. However, the right of parents to be involved in their child's education is also a responsibility. When parents shirk this responsibility, they jeopardize the educational future of their child by profoundly affecting his attitude toward the educational process.

Here it should be emphasized that the most basic education of children takes place not at school but at home. Their basic life values, their perceptions of self and others are formed primarily in the home. Without parental involvement, those values and their behavioral expressions can only be slightly modified, for what is taught in school becomes meaningful only when parents are interested and involved in their child's school learning.

Parents—A special education necessity

Even if we grant the argument that parents have, in large part, caused most of the behavior problems which children exhibit in school, it does not logically follow that parental involvement is therefore inappropriate. On the contrary, no better reason for extensive parental involvement in special education can be cited. If parents are not part of the school's role with their child, they will continue to contribute to his problem.

Moreover, parental contributions to the etiology of the various handicapping conditions are not uniform. Parents may be responsible for some handicapping conditions. Parental neglect or mismanagement can at least indirectly retard a child's language, speech, and/or intellectual functioning. But a variety of handicapping conditions

are beyond the voluntary control of parents, including physical and neurological handicapping conditions, learning disabilities, many types of mental retardation and speech disorders, and specific conditions of emotional disturbance attributable to peer and school influences.

At the same time, it should be recognized that several designations of handicap have been seriously questioned by many special educators. We are no longer certain that our categorizations of mental retardation and emotional disturbance do not reflect merely our own sociocultural biases, which suggests that many of our placements may be legally unjustifiable. Obviously, if categorization is suspect, assumptions of parental guilt and responsibility for such categorized conditions must also be questioned.

For these reasons many professionals feel that no useful purpose is served by continuing to blame parents for a child's behavioral problems. Perhaps, they suggest, we might be more effective as educators if we try to work in partnership with parents for the betterment of the child's handicapping condition. These authors and a growing number of special educators affirm the essential validity of Voelker's suggestion that we recognize;

> *the importance of cooperation and understanding between the home and the school if the child is to realize his maximum growth and development. When parents and teachers work at cross purposes the child suffers. When parents and educators possess a mutual appreciation of the role each has to play in the education of the child, opportunities for development are increased.*

Contemporary research on parental involvement in the schools

The overwhelming trend of current research supports parental involvement in many aspects of the regular instructional process. Such involvement has ranged from parents' successful participation in child-management discussion groups, through the provision of instruction for thier preschool and school-age children, to functioning as teacher aides in the classroom.

These and a variety of other types of involvement have convinced many educators that constructive parental involvement is necessary to the effective operation of schools—that only through extensive parent-community participation will schools function effectively. As Lopate et al. (1970) noted in their review of literature pertaining to parental involvement and community participation:

> *Educational research indicates that when parents of school children are involved in the process of education, their children are likely to achieve better. This heightened achievement may be due to the lessening of distance between the goals of the school and the goals of the home and to the positive changes in teacher's attitudes resulting from the greater sense of accountability when parents of their students are visible in the schools. The child may also achieve better because he has an increased sense of control over his own destiny when he sees his parents actively engaged in decision making in the school.*

A similar trend favoring parental involvement can also be noted in the literature of special education. In speech pathology, for example, parents have been successfully trained to facilitate the therapist's task. In separate studies mothers trained in basic speech-correction methods were able to significantly improve their child's acquisition of articulated sounds. With other speech handicaps, counseling approaches alone have been the more effective form of involvement.

Successful parental involvement has been noted in mental retardation as well. While the major program efforts in this area have emphasized successful involvement through counseling, some studies have indicated that more extensive home-school interactions can be successful.

Public school involvement with parents of physically handicapped and neurologically impaired children has tended almost exclusively toward counseling approaches. Awareness of the need for more parental involvement in this area appears to be growing, however, for as Connor, Wald, and Cohen (1970) noted, the teacher has "the responsibility for helping parents assume active roles in programming for their children and must constantly keep in mind the need to interpret realistic goals to parents."

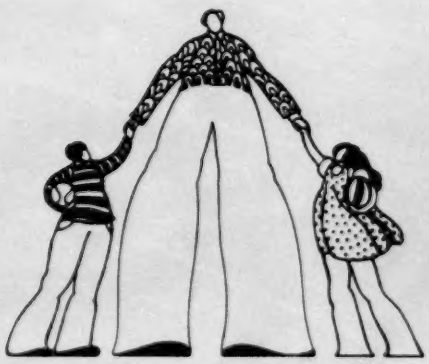
Despite the reservations of many professionals in the area of emotional disturbance, direct parental involvement in behavior modification has been successful in a number of studies. These findings have led several authors to suggest that extensive parental involvement be considered an essential treatment procedure for emotionally disturbed children in both public school and clinical settings.

Finally, several studies have indicated that parents can be successfully involved in facilitating the remedial instruction of their learning disabled children. Shatter (1957) and Studholme (1961) noted that parent group counseling on practical aspects of

child management significantly improved reading achievement among disabled readers. More direct involvement through parental extension of school remedial programs has also had favorable results in several studies and reviews. In sum, these studies and reviews confirm a growing consensus among professional educators that parental involvement is a necessary prerequisite to effective instruction in both general and special education.

Conclusion

This review has sampled the extensive literature of parent involvement in general and special educational contexts. While many educators continue to disparage involvement in both contexts, a growing consensus favors a variety of active home-school working relationships. In special education particularly, such a trend emphasizes the relative importance of parents in many program efforts. In our preoccupation with etiology and suspected parental mismanagement of child-raising processes, it is easy to forget that much of our present program growth has been a result of constructive parental influence on public policy and legislation. The current literature reminds us that parents can be an important resource to benefit children—indeed, that parents must be extensively and constructively involved if our program goals are to be realized.



Working with Parents

American education is presented as a free and equal educational opportunity for all children. Passage of PL 94-142 is helping this concept become a reality for handicapped children and their parents. With parental involvement in the IEP planning conference, a more thorough program can be planned for each exceptional child. In some instances, the student is involved actively in his or her own program planning.

In preparing for planning conferences, the special education teacher soon becomes aware that some parents hesitate to participate in such meetings. Without thinking, educators frequently brand these parents as uninterested, lazy, or similar terminology. In any case, these parents appear to be unconcerned about their child's educational welfare.

Unfortunately, educators tend to put the blame on the parents rather than on the "system" or other factors that may influence parents reactions to requests for attendance at special meetings concerning their children. It will help the teacher if he or she tries to understand the parents side of the situation.

The first step in preparing for an IEP conference involves an evaluation of the child from an educational standpoint. This evaluation procedure frequently is referred to as "psychological testing"—a term that is often misinterpreted by the general public. "Psychological" is confused with "psychiatric," which in turn implies "crazy" to many parents. Also, parents fear that such testing may point a finger at them for having made the child the way he is, especially if the exceptionality has to do with retardation. Society still insists on "putting a pox" or stigma on fmailies with children who are not "normal," and too many families consider this situation as their "cross to bear" alone through life.

Thus, educators inadvertently may have increased the distance between parents and schools by using inappropriate terminology during their initial contacts with parents. Instead of thoroughly explaining *why* and *how* the child is to be evaluated, many school systems indicate only *what* is being tested—and this often implies IQ to the parents.

The procedure described above puts many parents on the defensive at the onset. To be told that your child has a learning problem (that he or she is somehow different from other children) can be traumatic. Even if the parents already suspected that their child had such a problem, confirmation of these suspicions may be more than they are ready to deal with at that particular time.

One doesn't know what has been going on in the parents minds prior to notification from the school that their child is to be evaluated. Perhaps Aunt Sophie has been pointing an accusing finger ever since the mother insisted on seeing "Planet of the Apes" during her third month of pregnancy. Or Uncle Herman has insisted that the father came from a "no good" family for sure. Or maybe the pediatrician has patted them gently on the shoulders and assured them that their child soon would outgrow his or her problem.

Another reason for parents to be defensive or even fearful may be that this child is following a pattern established by one or both parents. A parent who had difficulty in school may convey this attitude in how he or she treats educational experiences of the offspring. If this parent was ridiculed throughout the school years, he or she may wish that the child remain in school only long enough to acquire the basics necessary for securing a job.

Further, parents may not want their child to be singled out for evaluation and possible special placement in the educational program. It emphasizes to them that their child is different and, again, this is interpreted as a direct reflection upon themselves as parents and as adult human beings. Rather than seeing the educational planning process as a potentially positive aspect of their role as parents, they may view it as a negative implication of their own capabilities.

If a parent refuses to become involved in a conference such as mandated by PL 94-142, the child should not be dropped from the program. Rather, the school should work toward helping the parents *want* to become more involved in the total educational experiences of their child. Working hours, misinformation, unconfirmed prejudices, fear of the unknown, and biased negative feelings toward the school system in general may prevent the parent from "cooperating."

An informal pre-conference with the parents could pave the way toward a working relationship between parents and teachers. The conference should be structured from the viewpoint that the teacher knows exactly what is proposed to be accomplished within the time period allowed for the pre-conference, but does not give the impression that these concerns are systematic to the point of being rigidly adhered to no matter what happens during the conference.

Making a list of specific information to be exchanged between the two parties will help the teacher formulate appropriate questions to be asked. These should be ranked in order of priority, then re-ranked according to the feasibility of obtaining adequate answers during the preliminary conference. Of vital importance is to convey to the parents the child's learning needs from the teacher's standpoint, the program's overall objectives, and how the role of special education ties all of these concerns together to help the individual child.

More than one meeting may be needed to develop meaningful contact with parents, but once parents experience a positive relationship with the school, they most likely will want to become more actively involved in the total educational experience of their child.

> After parents have participated in the initial IEP conference, how can the teacher help maintain their interest and support in their child's educational program?

Although the team approach to providing services for handicapped children is not new to most special education teachers, active involvement of the parent — and in some cases the child — around the IEP conference table is a unique experience for parents and educators alike. In the past, major educational decisions were made by designated personnel within the school system while parents remained on the perimeter. Now, parents are required to take an active part both in planning and implementing the IEP's they helped develop.

This involvement on the parents part might be difficult for some of them to cope with initially, since it may be a drastic change from their previous role as observers of their child's learning activities. After experiencing negative or even apathetic aspects of educational systems that have been unable or unwilling to provide appropriate services, many parents may hold back their involvement, in disbelief that they now have such rights protected by law.

To help parents over the hump of this new role in the educational lives of their children, special education teachers should be aware of some of the ways in which they can aid parents in their continuing interest and support. The following are some suggestions for teachers to help maintain parental involvement.

DO help parents over the hump of this new role in the educational lives of their children. Special education teachers should be aware of some of the ways in which they can aid parents in their continuing interest and support. The following are some suggestions for teachers to help maintain parental involvement.

DO encourage parents to share their concerns with you. They may feel intimidated at first, but continued contact should improve their confidence level. If they are harboring negative feelings toward the IEP goals established for their child, little progress may be evidenced until the air is cleared of these feelings. This doesn't mean you need to establish encounter group sessions — only that communication be kept open and honest on both sides.

DO listen to the parents. They should be able to provide information that is valuable to you as their child's teacher. After all, parents have been with this child daily since birth and should know the child better than anyone else by the time he or she enters a public school program.

DO try to see the parents' side of the situation. They didn't ask to have a child with a handicap. At least you had the option to choose work with the handicapped as a profession. For parents, there is no 3:30 in the afternoon on school days. Nor is there a two-day weekend to anticipate when things get rough.

DO encourage the parents to share with each other. Organize small group discussions in which parents can meet with (or maybe even without) you to share their mutual concerns. Arrange car pools for parents who may have problems in transporting their children.

DO encourage the parents to become more involved in classroom activities through home assignments related to what is happening in the classroom. Note that "home assignments" is used rather than "home work" — to encourage reinforcement activities with involvement by both parents and children. A simple review sheet may be provided as a basis for parent-child discussion. Better yet, a set of general questions may be given to parents each week to help them initiate conversations with their children regarding classroom activities. Try to keep these home assignments short and not just a rehash of worksheets done in the classroom.

DO encourage parents to make mental and/or written notes concerning their child's progress at hon

Written notes may take more time, but they are more meaningful because of their documented form. Doing this also will help parents formulate questions and comments when conferences are scheduled, and a review of their written comments will help them tie together home and school activities.

DO encourage your students to talk with their parents about classroom activities. A simple language experience story at the end of the week may be written by the teacher while the child dictates, or the child may practice writing or typing skills by copying the "story." Postcards, short letters, or drawings describing classroom activities also may be used.

If possble, cassette tapes may be made periodically. The format should be varied to maintain interest on everyone's part, and the activity should be a "fun" one the deemphasizes academic pressures. The child could even use a form with incomplete sentences to help organize his or her thoughts. Start sentences like, "This week I liked it when_____ _____"; "I did my best work on _____"; or "I tried_____ for the first time this week" may be helpful in the beginning.

DO keep the parents informed about the program, current issues in education related to PL 94-142, and parents' rights in the education of handicapped children. Parents cannot be expected to become active participants in a program they do not understand fully. Educating parents concerning PL 94-142 may be the first step necessary for their commitment to educational goals for their child. Therefore, you must be familiar with the concepts and terminology utilized in the law. Familiarity with PL 94-142 is necessary for parents and educators alike, with emphasis on "down to earth" explanations and examples throughout each phase of the law.

But please. . .

DON'T use professional jargon with parents. This tends to widen the gap between parents and educators since so many of the terms are ambiguous-sounding at first. Of course, you needn't resort to a third grade speaking vocabulary either. Rather, treat the parents as adults, using terminology with which they can easily identify in their own experiences. Instead of discussing their child's "visual perceptual motor match" problems, why not substitute "eye-hand coordination," with an example of their child's particular problem in this area.

DON'T underestimate the parents. Many of the current laws regarding the handicapped have been the direct result of parent action groups throughout the country who have joined forces to demand equal rights for their children. Work toward having the parents communicate openly with you rather than silently against you.

DON'T let your own frustrations interfere with your conferences with parents. Everyone has days when everything seems to go wrong. At the end of each day, take a few minutes to note the positive things that happened during the day. This may not always be easy to do, but surely something good emerged from classroom activities during the course of a day.

You may wish to add to this list or make your own list of *DO* and *DON'T* ideas that individualize your own teaching situation regarding continued interest and support on the part of parents involved in the IEP conference.

Basic Forms of Parent-Teacher Interaction*

Introduction

In teacher education classes and inservice programs, teachers for years have said "parent involvement is essentially the responsibility of the classroom teacher, but I don't have the time or training to involve my parents." With the added responsibilities placed on mainstreaming personnel by P.L. 94-142, it is not difficult to understand why teachers are now very concerned. Few have had any formal training in parent involvement, yet they have inherited the responsibility of working with parents because other public school professional staff in the school district have often avoided it.

In view of the new realities mandated by P.L. 94-142, it is now, more than ever before, critical that not only teachers, but also counselors, school psychologists, nurses, administrators, and curriculum specialists become aware of their shared responsibilities for the four basic parent-teacher interactions--namely, parent-teacher conferences, the IEP conference, parent education, and parent training. In the following sections, the content of each type of interaction is covered with emphasis given to teacher-relevant actions which guarantee their success.

Parent Conferences

These conferences are conducted between the most significant people in the child's life--the teacher and the parents. Preliminary planning is important because without planning, conferences often end up in conversation with no specific plans.

Long (1971) lists some general guidelines for teachers in planning any initial conference:

1. Study the child's cumulative records, plan in advance to cover specific areas of the child's background or educational history that seem pertinent, and list the points to be covered for reference in case the meeting becomes sidetracked.
2. After beginning with a friendly or welcoming remark, outline at the outset which areas of the child's performance or background will most likely be covered so that the parents have an idea of what will be stressed and when and where to introduce topics they may wish to raise.
3. Have on hand representative samples of the child's best, worst and most characteristic work, but engage the parents in positive discussion about the child before discussing the child's current work or problems.
4. Avoid professional jargon and try to communicate simply but accurately, in language appropriate to the parents' educational, social, and cultural background.
5. Reinforce and encourage the parents' continuing to take an active interest in their child's school experiences.
6. When discussing the child's current performance, try to emphasize the child's strengths, assets, and positive accomplishments, making a limited number of realistic suggestions for their improvement.

When a series of conferences are planned, attention must be given to the gathering of information concerning the home background, the parents' child management practices, and their understanding and reinforcement of school work. Answers to the following types of questions will make future conferences far more productive:

1. What kinds of expectations do the parents have for the child in terms of social behavior, home responsibilities, school work, etc.?
2. What types of discipline do the parents use for different kinds of misbehavior? Is it effective?
3. What rewards are provided for appropriate work? Does the child have an allowance and for what purpose? How is it spent?
4. How is free time used and on what activities (i.e., hobbies, television watching, friends, etc.)? What amount of time is spent on various activities per day?
5. What organizations or teams does the child belong to?
6. Who are the child's friends? How does the child get along with siblings?
7. What out-of-school educational activities interest the child? What types of books, films, or activities are enjoyed?
8. When and under what conditions is homework done? What is the child's perception of school work and his abilities?

*From an abridged article by Bill R. Wagonseller in *What Will We Do In The Morning*, W.C. Brown Publisher.

During the conference itself, the teacher should make every effort to set up a positive atmosphere which minimizes any anxiety parents might feel about attending a parent-teacher conference. The teacher should exercise leadership in covering the basic content of the conference, but also reinforce parental input directly or indirectly related to the child's problems. At all times parents must know that the teacher's essential interest is in working cooperatively with the parent to help the child reach his position potential at both school and home--that responsibility for this effort should always be shared between them.

Once rapport has been established, discussions of specific academic goals, the child's relative strengths and weaknesses, techniques for handling problems, and topics of mutual concern should be discussed. Finally, future conferences should be planned. The conference should end with the teacher giving specific changes not generalities. Follow-through techniques should also be discussed (e.g., through the use of daily or weekly notes or phone calls). As a logical follow-up to conferences, many special and regular education teachers use telephone calls to develop and maintain cooperative parent-teacher interactions. While telephone calls can be effectively used to report on home or school problems that need immediate attention, they should also be employed to report on positive behaviors of the child at school. This latter practice should be encouraged, for use of the telephone only for negative purposes soon turns parents off and communication eventually suffers.

In successful public school mainstreaming, or resource room programs espeically, results of any parent conference conducted by either the special education or regular education teachers is mutually shared whenever possible. When such communication is established between parents, special education, and regular class teachers, the child's chances for a quality education are maximized, for they are in a position to jointly assist on the child's behavioral and educational problems at both school and home. This is, in essence, a parent-teacher partnership--a partnership whose maintenance must be fostered by teachers as part of their professional responsibility.

Individual Education Program Conferences

The individual education program (IEP) conference is a somewhat formalized meeting designed to carry out the procedural safeguards provisions of P.L. 94-142, the Education for All Handicapped Children Act. While such a meeting is usually conducted in conference fashion, it must also be structured to develop an annual statement covering the specific handicapped child's levels of educational performance, suitable long-term educational goals, short-term instructional objectives, relevant services to be provided, the extent of participation in regular classes, and related evaluative procedures.

The intent of the IEP meeting is to insure all persons that have information concerning the child have input in making decisions which represent the child's best interests. The IEP meeting is chaired by an administrator of the local education agency or an assigned person that can make decisions regarding (staff roles, monies and space) that might be needed to insure that attainment of specific educational goals. The child's special education teacher has the primary responsibility for program planning and placement. The parent is a member of the team and provides information about the child that will assist the team in developing a plan. The law also mandates parents' rights to participate in planning for the exceptional child's education program. The child may be a member of the IEP team if deemed appropriate.

While the IEP is not a binding contract, it is a statement of intent between the parent and school personnel which spells out what services will be provided to assure exceptional children a free and appropriate public education. The IEP is also considered a management design of holding education programs responsible for the education of exceptional children. IEP meetings must be conducted prior to placement in a special education program.

Regular education teachers working with exceptional children are not required to attend the IEP meetings and in many school districts they are not invited to attend. In most instances, however, it is extremely important that regular classroom teachers be included in IEP conferences, for their involvement is critical to the development of a **total** program appropriate to the handicapped child.

While the IEP meeting is a critical first step in securing constructive parental involvement, regular parent-teacher conferences should be scheduled after this meeting to review the child's progress. Such parent-teacher conferences are often included as part of the original IEP plan as one of the specified "services to be provided" as appropriate to the education of the handicapped child as any other part of the educational program.

Parent Education Meetings

Some distinction at this point should be made between parent education and parent training. Parent education is essentially designed to educate

parents about some aspect of their child's school performance. Thus, developing methods and/or listening to professionals regarding curriculum related subjects (i.e., reading, math, handwriting, language, etc.) are considered parent education. Sessions using professional speakers to educate the parent on specific topics related to the child's psychological, emotional or physical deficits would also be considered parent education.

Parent training, on the other hand, focuses upon the training of parents in specific skill areas, such a communication skills between parent and child or the managing and motivating of appropriate behavior. This topic is covered in our next section.

Parent education sessions are designed to allow parents of exceptional children to gain understanding and information beyond that which is generally provided by the traditional parent-teacher conference. As Kelly (1974) noted, "more than any other forms of involvement, active parental facilitation of specific subject-matter learning must reflect a marked degree of parent-teacher cooperation. Without this type of working relationship, most specific remediation or tutoring can never be fully realized."

Parent education meetings should be designed to cover topics that facilitate parents working with school-related concerns. Language development and acquisition, perceptual motor skills, gross motor and fine motor skills, specific academic subject matters, and common remedial techniques are all suitable topics for this type of meeting. Such meetings whould be regularly scheduled throughout the school year with expert speakers covering specific subject matters per meeting. The dates and specific meeting titles should be known by teachers and administration so they can recommend, during parent-teacher conference or IEP meetings. sessins which might be meaningful for individual parents.

At the same time, individual teachers can set up single topic meetings for a group of parents in a specific school. Such groups may be composed of parents whose children share some common problem like difficulty in mathematics, reading, handwriting, or language arts. Specific topics, for example, might be, "How to help your child with his arithmetic homework" or "Teaching reading at home."

This less "formal" type of parent education meeting has several advantages. They can focus upon brief topics of specific relevance to the teacher's parents. They also can provide parents an opportunity to share mutual concerns and solve mutual problems with the teacher and other parents. Finally, such meetings maximize the teacher's time, enabling her to communicate information to a group of parents rather than individually on a conference by conference basis.

Parent Training Meetings

As we have already noted, parent training sessions focus upon the acquisition of specific skills applicable to parenting, with parent-child communication skills and behavior management techniques being two of the most common topics. These meetings accomplish several purposes. They communicate information to parents quickly and efficiently, faciliatate their problem-solving efforts, and train them to use specific behavior management s:ategies.

Many parent-training programs use commercially audio-visual parent education kits as the vehicle for getting parents to attend the training meetings. There are a number of commercial materials that require a minimum amount of background to use. Usually the materials have guides and manuals for leaders and participants and worksheets. These materials require the user to have a tape recorder, phonograph, slides or filmstrip projector.

The following kits address various phases of parenting, parent education, or working with parents:

1. *Systematic Training for Effective Parenting* by Don Dinkmeyer and Gary D. McKay, American Guidance Service, Inc., Circle Pines, MN 55014, 1976.
2. *Managing Behavior: A Parent Involvement Program* by Richard L. McDowell. B.L. Winch and Associates, P.O. Box 1195, Torrance, GA 90505, 1974. Also, distributed by Research Press, Chanpaign IL.
3. *Even Love is Not Enough: Children with Handicaps.* Parent Magazine Films, Inc., 52 Vanderbilt Ave., New York, NY 10017, 1975.
4. *The Art of Parenting* by Bill R. Wagonseller, Mary Burnett, Bernard Salzburg, and Joe Burnett. Research Press, Champaign, IL., 1977.
5. *Keeping in Touch with Parents: The Teachers Best Friends* by Leatha Mae Bennet and Ferris O. Henson. Learning Concepts, 2501 N. Lamar, Austin, TX 78705, p. 251.

While many past parent training programs have tended to emphasize the problems of parents whose children have major behavior management programs, the current focus of most programs (and the above training kits) is upon preventative types of

parent training. This latter approach enables parents to obtain skills which either prevent problems or at least lead to effectively cope with them before they become overwhelming.

Prospective leaders of parent training sessions include school administrators, psychologists, social workers, counselors, teachers or trained parents, or other consultants. The order cited is irrelevant, for any of these individuals could be a very effective group leader. What is essential, however, is that the leader assume the role of group facilitator, promoting group discussion and collective problem-solving. As a group facilitator the leader:

1. Treats all questions as relevant and encourages parents to ask questions; Discussions by parents of key points are also encouraged.
2. Informs parents the first night, when ground rules are being established, that this is a parent training program and not a parent therapy program. Domination of discussions by a single parent will not be encouraged, since such a practice precludes adequate coverage of the training materials. At the same time, parents can be encouraged to cover their children's specific problems on the last night after all training materials have been covered.
3. Uses adequate simulation activities and materials. Simulation is an excellent technique for provoking discussion and allowing parents to respond to the handling of specific problems in the home. Simulation should correlate closely to the material covered in a particular session.
4. Develops audio-visual materials and handouts or uses packaged kit materials to avoid any impression that the leader is starting from scratch.

Summary

In the final analysis, parent conferences, IEP meetings, and parent educational training sessions are all designed to effect constructive parental involvement with their exceptional child and his or her work in school. This latter point is most critical for it can also reflect upon our competence as professional educators. When parents are adequately trained and educated, when they are consulted on their child's school achievement and encouraged to facilitate it in the home, then a truly meaningful parent-teacher partnership can be forged--one which literally guarantees our successful efforts in the classroom.